Culture into Architecture:

Amalau - Designing a Samoan Village for the Future.

Leah Stucky
May 2011

Submitted towards the fulfillment of the requirements for the Doctor of Architecture Degree.

School of Architecture
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Doctorate Project Committee
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We certify that we have read this Doctorate Project and that, in our opinion, it is satisfactory in scope and quality in fulfillment as a Doctorate Project for the degree of Doctor of Architecture in the School of Architecture, University of Hawai'i at Mānoa.

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Abstract

According to Samoan oral tradition, Samoan architecture has existed since the beginning of time. Yet information on this subject is limited, and must be sought out by the determined researcher. This thesis synthesizes research on sustainability, regionalism, culture, and lifestyle at the residential scale, and unites the past, present, and future of Samoan architectural design in a concept home designed for a specific Samoan family.

We have begun to realize that, in order to survive in this changing world, we must change the ways in which we design, build, and live. This thesis explores the regionalism of the Samoan islands in terms of Samoans' everyday lives, and in terms of the core values (God, faith, family, respect, honor, the church, the *matai* (chief) system) in which Samoan life is rooted. It explores traditional Samoan building methods, and maps their changes through time. It considers sustainability, and how it has affected building materials and techniques. Finally, it examines the cultural and social systems that define Samoan society and Samoan architecture.

The result is a prototypical concept model for a new type of village and a culturally sensitive home for a Samoan family. It aims to represent all aspects of Samoan culture (past, present, and future), and to accommodate the Samoan way of life. One that encompasses their regional systems, the cultural aspects of Samoan culture that help to dictate the uses, forms and purposes of architecture and one that adjusts to the Samoan lifestyle and way of life that is so lovingly, faithfully and greatly respected. A design that brings together the past, the present and the future of Samoan architectural design while keeping true to the principal values on which the first *fale* was built, the design not only

represents the culture, but it also looks toward a sustainable future and a better way of life for future generations in the Samoan islands.

The following is an excerpt from *Connections*, by Cherie Barford, published in *Niu Voices:*

on sunday the priest said *teu le va*

make presentable the distance

between you and others

there is no such thing as empty space

just distances between things

made meaningful by fine lines

connecting designs and beings

in the seen and unseen worlds

distances can be shortened

made intimate or dangerous

or lengthened

until the connection weakens

finally withers away

Contents

Glossary of Terms*

*Modern Samoan orthography is not standardized in its usage of the diacritical markings for the long vowel (macron) and the glottal stop (inverted comma). In the body of this text I have used the most common representations of the Samoan words and terms used in this thesis. In many cases the macron and inverted comma are omitted. The glossary of terms below are all marked phonemically with the macron and glottal stop (an apostrophe was used instead of the inverted comma).

Samoan Terms

ʻafakasi = half-caste

aganuʻu = Samoan cultural customs

ʻāiga/ ʻāiga potopoto = extended family

aitu = ghosts

aliʻi = high chief

amo pou = main plates

āʻoga faifeʻau = pastor's school

aso = small ribs

ʻauʻāiga = family

aualuma = organization of village girls

auau = ridgepole

ʻaulotu = church congregation

ʻaumaga = untitled men's organization

ʻautalavou = church youth group

ʻava = Polynesian drink

Faʻasāmoa = the Samoan way

faʻalavelave = anything that interferes with normal life and calls for special activity

fale = house

fale afolau = long house

fale oʻo = small sleeping huts

fale pālagi = rectangular/western/European-style house

fale Sāmoa = Samoan house

fale talimālō = meeting area/house

fale tele = round house

faletua ma tausi = committee of the wives of chiefs

fatuga = flat oblique rafters

fau = round rafters

feʻau = chores

fono = meeting

iliili = pebbles

ʻi luma = front

itū = sides

ʻi tua = back

komiti tūmama = women's committee

lalava = Tongan lashings

lau tolo = sugar cane leaves

malae = field/sacred political ground deemed the center of distinguished activity

malaga = traveling party

matai = chief

moamoa = small, flat, round or rectangular block of wood lashed to end of ridgepole

nuʻu = village

‘o le nu‘u o ali‘i = the village of men

‘o le nu‘u o tama‘ita‘i = the village of women

‘oloa = goods

paepae ma‘a = platform

pola = blinds

pou tū = posts

pou lolo = small outside posts

saofa‘i = ceremonial installation

so‘a = horizontal rafters

tai or ‘i tai = seaward

taotao = two rafters lashed on to the oblique rafters

taualuga = process of placing crest on ridgepole

tautua = service

te‘e auau = uprights that help support the auau

toga = fine mat

to‘ona‘i = Sunday lunch

tufuga fa‘i fale = master builder/architect/carpenter

tuitui = heavy longitudinal beam

tulāfale = orator

umukuka = cooking fale

uta or ‘i uta = landward/toward the rear of the village

utu poto = crossbeams/joists

vā = the space between

Samoan Proverbs

"*o le teine o le 'i'oimata o lona tuagane"* A girl is the inner corner of her brother's eye. (Schoeffel: 130) –page 32

"'*o le ala i le pule 'o le tautua*" The path to power is through service. (Shore: 64) –page 52

"So'o le fau ma le fau" To tie together two pieces of fau. Proverb: To pursue a goal with united strength." (Sutter: 1) –page 107

"*E fa'apupuati le gase*. Like a *ti* plantation that never dies. Traditions, family trees and the happenings of ancient times are not forgotten, but survive among the people." (Schultz 2008: 52) –page 142

Maori Terms

Aotearoa = Maori name for New Zealand

hapū/iwi = tribe

heke = rafters or ribs of the ancestor

kaitiakitanga = guardianship

kōrero = story

koruru = gable head on ancestral Maori meeting house

maihi = arms of the ancestor

manaia = stylized bird profile figure commonly used in various carvings

marae = courtyard/open area in front of the meetinghouse

nui = big

Pākehā = New Zealander of European decent

pou or pou tokomanawa = inside post described as the heart of the ancestor

poupou = wall posts/carvings designed to support wharenui

raparapa = fingers of the ancestor

tāhuhu = ridgepole that forms the ancestor's backbone in the meeting house

taonga = treasure

tapu = sacred/forbidden/under restriction

tekoteko = figure on top of koruru

tīpūna = ancestor

tohunga whakairo = master carver

waka = canoe

whakairo = carvings

whakapapa = genealogy of a Maori tribe

whānau = family

whare = house

whare rūnanga = chief's house

wharenui = communal Maori meeting house

Figures

Figure 1: Catholic Church in American Samoa

Figure 2: Tongan Church in Otara, Auckland, Aotearoa/New Zealand

Figure 3: Tongan Church in Mangere, Auckland, Aotearoa/New Zealand

[1] All photos in this document were photographed by me Leah Stucky.

Preface

The inspiration for this project was a 2008 trip that I made to American Samoa with one of my good friends and her family. I had known my friend's family for several years and was welcomed with open arms into their diverse and loving *'aiga* [family]. The purpose of the trip was to attend the 10th Annual Pacific Arts Festival, which occurs every four years and was hosted in 2008 by American Samoa. Spending time with my friend's family, and learning more about and being immersed in the Samoan culture, intensified my love for it.

As we journeyed throughout the island, we had the opportunity to visit their family's plot of land, which had been passed down from generation to generation (most land in Samoa is held communally). It was while I was visiting the land that I was inspired to design a home for a Samoan family—a *fale talimal*o [meeting area] where relatives from out-of-town could stay, visit, and share with one another. It would be a space for family gatherings, reunions, and vacations, where loved ones could gather to commemorate those who have gone before them. It would not only be compatible with the Samoan lifestyle, but it would also reflect the immense love, respect, and faith in which Samoan families are rooted.*

*As this thesis has come together, its vision has transitioned from just a home to a design for the whole land, encompassing several houses that will constitute a miniature village on the compound—one that speaks of and represents the Samoan culture.

Introduction

"The choice of the inhabitants of the eighth heaven to be the master builders ranks them in station just below the gods themselves. Like their progenitors, the architects were endowed with the capacity to create meaningful, productive space" (Guernsey 35).

History

Samoan legend, as told by Henry and Turner, describes the creation of Samoa:

> To the Samoans of old, Samoa was the whole earth. There is a tale of creation beginning with *Leai* (nothing), followed in succession by *Nanamu* (fragrance), *Efuefu* (dust), *Iloa* (perceivable), *Maui* (obtainable), *'Ele'ele* (earth), *Papatu* (high rocks), *Ma'ata'anoa* (small stones), then *Mauga* (mountains). [2]

Turner goes on to tell the story of how Samoa got its name:

> The rocks married the earth, and the earth became pregnant. Salevao, the god of the rocks, observed motion in the moa or centre of the earth. The child was born and named Moa, from the place where it was seen moving … Salevao then provided water for washing the child and made it sa, or sacred to Moa … Salevao said … that everything which grew would be sa ia Moa, or sacred to Moa, till his hair was cut. After a time his hair was cut and the restriction taken off, and hence also the rocks and the earth were called Sa ia Moa, or as it is abbreviated, SAMOA.[3]

The islands of Samoa, Independent Samoa, and American Samoa are located in the South Pacific Ocean at 14 degrees south latitude and between 168 and 173 degrees west longitude, approximately halfway between Hawai'i and New Zealand. The islands

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[2] Henry, Brother Fred. Samoa: An Early History (American Samoa Department of Education, 1980). P.27

[3] Turner, George. Samoa: A 100 Years and Long Before (London: Macmillan and Company, 1884). P.10,11

of Samoa comprise two large islands, Upolu and Savai‘i, and two smaller islands, Apolima and Manono. To the east of Samoa lies American Samoa, which comprises Tutuila, the largest island; Aunu‘u island; and the Manu‘a island group, which consists of three smaller islands: Ta‘u, Ofu, and Olosega.[4] Swain’s Island is also within the territory of American Samoa, but it is a part of the Tokelauan Atoll.

Although Independent Samoa and American Samoa have grown apart politically, they remain strongly tied to the values that will always keep them Samoan: love, faith, and respect for culture.

The Samoan islands were at one time a united island group, encompassing what is now Independent Samoa (formerly known as Western Samoa) and American Samoa. In the late 1800s the United States, Germany, and Great Britain vied for control and use of the islands by backing two different warring chiefs. Samoa was eventually separated into the two island groups: German Samoa, a colony of Germany, and American Samoa, a territory of the United States.[5] In 1914 New Zealand occupied German Samoa, taking control of the islands. It continued its administration of the islands until 1962, when Samoa advocated for independence and became the first Polynesian nation to regain its independent status.

There are two stories of the origin of Samoa: a Western anthropological history and an indigenous mythical history. The anthropological history suggests that the ancestors of Samoan people, Austronesians, migrated from China and Southeast Asia via

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[4] Holmes, Ellen Rhoads and Holmes, Lowell D.. Samoan Village: Then and Now, 2nd (Orlando: Harcourt Brace Jovanovich, Inc., 1992). P.11

[5] Holmes, Ellen Rhoads and Holmes, Lowell D.. Samoan Village: Then and Now, 2nd (Orlando: Harcourt Brace Jovanovich, Inc., 1992). P.20

Oceania over thousands and thousands of years and settled in the Samoan islands, which were created by volcanoes and lava.[6] The mythical history tells of how the islands were formed by the god Tagaloa—how he spoke the islands into existence and then created people to populate, cultivate, and live on the land. Samoan mythology also talks about the first architects on earth and how they were entrusted to "create meaningful, productive space."[7] According to this myth, Samoans have been creating architecture and incorporating their culture into every aspect of what they built since the beginning of time. They are the prime example of the connection between culture and architecture.

As Guernsey relates in her dissertation on vernacular architecture in rural Samoa, "The choice of the inhabitants of the eighth heaven to be the master builders ranks them in station just below the gods themselves. Like their progenitors, the architects were endowed with the capacity to create meaningful, productive space."[8] These architects created the first structure for Tagaloa. This first house "functions as a physical emblem of the supernatural origin of architecture and of master builders,"[9] completing the creation process and giving humans a purpose: to live on earth and not in the heavens.

According to this myth, it is the architect who is entrusted with integrating Samoan culture and lifestyle into dwelling spaces, and optimizing these spaces for specific purposes.

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[6] Holmes, Ellen Rhoads and Holmes, Lowell D.. Samoan Village: Then and Now, 2nd (Orlando: Harcourt Brace Jovanovich, Inc., 1992). P.14,15

[7] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.35

[8] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.35

[9] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.35

Regionalism and Sustainability in Samoa

Regionalism in Independent Samoa is similar to regionalism in American Samoa . Both island groups are predominantly ethnically Samoan, with smaller numbers of Europeans, Asians, and people of mixed ethnicity. The islands are also predominantly Christian Congregationalist. Other religions represented include Roman Catholic, Methodist, and Mormon. Samoan and English are the main languages spoken in both Independent Samoa and American Samoa.

Similar though they may seem, the two island groups are governed differently. The territory of American Samoa is an "unincorporated and unorganized territory of the U.S.; administered by the Office of Insular Affairs, U.S. Department of the Interior."[10] American Samoa abides by the laws and regulations of the U.S., and has a governor like any other state, but the traditional governance of the *matai* ("chief system"), which has been a part of Samoan custom for many centuries, still exists. As such, American Samoa's Senate is run by the local *matai,* and the House of Representatives is elected by popular vote. The *matai* system keeps peace on the island so effectively that police officers there do not carry firearms.

When the Independent State of Samoa gained its independence, it decided to take a different approach. It adopted some features of the Western parliamentary system, but kept a form of representation that was more consistent with the traditional Samoan *matai* system:

> With the exception of two seats reserved for voters considered to be outside the governance of the Matai system (out of a total of 49 seats), candidacy of parliament is

[10] Central Intelligence Agency, CIA -The Worldfact book-American Samoa, 23 April 2009, 23 April 2009 <http://www.cia.gov/library/publications/the-world-factbook/print/aq.html>.

> restricted to Matai (Samoan chiefs) as they are deemed to be the sole legitimate political representatives in Samoan society.[11]

The dominant political party is the Human Rights Protection Party, which was established in 1982. The government's commitment to social development is reflected in its priorities: education, health, and basic infrastructure. Although the government of Independent Samoa has ultimate jurisdiction in legal matters, its power outside the capital is limited, since most towns and villages remain under the control of local district and village councils headed by village chiefs.[12]

Independent Samoa's economy relies heavily on developmental aid, remittances from abroad, fishing, and agriculture. According to the *CIA World Factbook*, "Agriculture employs two-thirds of the labor force and furnishes 90% of exports." The government has requested, "deregulation of the financial sector, encouragement of investment, and continued fiscal discipline, while at the same time [it has called for] protecting the environment."[13]

American Samoa's economy, on the other hand, is closely linked with that of the U.S., its primary business partner. "Transfers from the US Government add substantially to American Samoa's economic well being," as do the fishing and processing of tuna, American Samoa's main export.[14] The territory also receives remittances from extended families abroad. This strengthens its economic status and its connection to the U.S.

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[11] Sutherland, Karen."Vulnerability to Climate Change and Adaptive Capacity in Samoa: The Case of Saoluafata Village," MA Thesis., University of Guelph, 2004. P.31

[12] Sutherland, Karen. "Vulnerability to Climate Change and Adaptive Capacity in Samoa: The Case of Saoluafata Village," MA Thesis., University of Guelph, 2004. P.31

[13] Central Intelligence Agency, CIA -The Worldfact book-American Samoa, 23 April 2009, 23 April 2009 <http://www.cia.gov/library/publications/the-world-factbook/print/aq.html>.

[14] Central Intelligence Agency, CIA -The Worldfact book-American Samoa, 23 April 2009, 23 April 2009 <http://www.cia.gov/library/publications/the-world-factbook/print/aq.html>.

Although the economies of both American Samoa and Independent Samoa help to keep the islands doing well, one major force threatens their survival.

Both American Samoa and Independent Samoa are at high risk of tropical cyclones, also known as hurricanes. Both island groups have suffered from their destruction in the past—and they can still suffer. American Samoa has been hit by three hurricanes and two typhoons over the last four decades—this in addition to the heavy rainfall, flooding, landslides, and mudslides caused by passing tropical cyclones.[15] Independent Samoa has had similar experiences with hurricanes in the last two decades, and before that in the late 1800s. Tsunamis have also been a threat to the islands.

Samoa's tropical climate is reflected in its architecture. Wall-less houses with high ceilings encourage the flow of air through the *fale,* making living in a hot and humid climate more comfortable and pleasant. Samoa's weather—high rainfall and high humidity with southeasterly trade winds—remains fairly constant throughout the year. Monthly temperatures average between 71 degrees Fahrenheit and 86 degrees Fahrenheit. The dry season lasts from May to October, and the rainy season from November to April. During these months Samoa receives approximately 75% of its annual rainfall.[16]

The impacts of natural disasters on Samoan culture are readily apparent, as recent trends in housing appearance and placement demonstrate. Global weather conditions and climate changes have become deciding factors in the design of modern architecture. With

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[15] Agency, Federal Emergency Management, FEMA: American Samoa State Disaster History, 23 May 2005, 3 April 2009 <http://www.fema.gov/news/disasters_state.fema?id=60>.

[16] Sutherland, Karen. "Vulnerability to Climate Change and Adaptive Capacity in Samoa: The Case of Saoluafata Village," MA Thesis., University of Guelph, 2004. P.29

the increased impact humans are having on nature, we must adopt sustainable practices to ensure the survival of the earth, and our own survival.

Rising sea levels threaten the coastlines of island groups. This is especially true for the Samoan islands, since the majority of villages and towns are located along the coastal areas. Because of this, residents will continue to move inland as the sea encroaches on their properties, and soil will become unstable as it is removed from hillsides to create space for homes. This will increase the risk of potential landslides and mudslides during periods of heavy rain. Heavy rainfall also brings flooding, which damages houses, plantations, roads, and other structures. Damage to plantations is especially problematic, because many of them produce the agricultural exports that contribute significantly to the country's economy.

Both Samoan island groups have realized the importance of sustainability and the preservation of their islands' resources, and they have banded together with outside groups to create national forest preserves. With the assistance of ethnobotanist Paul Alan Cox and many others, the territory of American Samoa created a lease agreement with the United States government that provides for the protection of their tropical rainforest for up to fifty years. This was possible because, upon cession of American Samoa to the U.S. in 1900, the American Samoan constitution guaranteed the preservation of a cultural tradition that allows Samoans to retain their ways of owning land communally, "an oral tradition of boundaries rather than written or surveyed, and a fierce protection of land and the status land provides a family."[17] As such, the land was leased to the U.S. government in 1993. Through the combined efforts of Mr. Cox and many generous donors, the

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[17] US National Park Service, National Park of American Samoa, 13 March 2008, 10 April 2009 <http://ww.nps.gov/npsa/faqs.htm>.

rainforest of Falealupo, a village on the island of Savai'i, Samoa, was also preserved as a National Forest reserve for fifty years by the Samoan government. That covenant, agreed upon by the chiefs of the village and the donors, would prevent further forest destruction from logging and ensure the preservation of the forest for the endangered Samoan flying fox, which is endemic to the islands of Samoa and American Samoa.[18]

Project Information

As our world continues to change and advance, we, too, must change the way we design, build, and live. The purpose of this project is to show the importance of incorporating culture, sustainability, and regionalism into architectural design. This will be achieved by 1) looking at the regionalism of the Samoan islands and understanding how it plays a part in the everyday lives of Samoans, and 2) understanding the culture and the core values (God, faith, family, respect, honor, the church, the *matai* system, etc.) in which Samoan life is rooted.

The design will be informed by Samoan architectural traditions, changes in construction techniques and building materials, and modern Samoan sustainable practices. Questions such as, "What is used now as opposed to what was used then?" and "What is being done to maintain the integrity of these materials in their relationship to their original purposes?" will guide the design process. In addition, this project will consider cultural systems such as family, chiefs, and villages, that strongly dictate the use

[18] Cox, Paul Alan. Nafanua: Saving the Samoan Rainforest (New York: W.H. Freeman and Company, 1999). P.157-159

and shape of spaces within society. The final design will not only represent the culture, but also work toward a sustainable future and a better way of life in the Samoan islands.

The capstone of this thesis will be a family compound that joins past and present-day Samoan architecture and represents the collective relational systems that form Samoan culture. It will be the next step in Samoan architecture, designed for the Samoan lifestyle. Though the model will be primarily applicable to Samoa, it may someday be applied to other places Samoans live. By investigating the transformation from the original *fale samoa* [house] to the modern Samoan house, the concept model can integrate the past, present, and future of Samoan architecture.

Chapter 1

About Samoa

"In Samoan culture respect is the foundation of life, no matter what dreams you may have, connection with family and pride in your heritage is the basis of what is known as *fa'asamoa*. The belief that there is greater worth than just the individual and you're always representing your people, your village, and God, this is the Samoan Way." ("Polynesian Power: Islanders in Pro Football" ESPN 2005)

Fa'asamoa (The Samoan Way)

Fa'asamoa is emblematic of how Samoan culture has evolved, and it has come to express to others the Samoan way of life. *Aganu'u,* the cultural practices that make Samoans Samoan, became *fa'asamoa* as Samoan culture transitioned from the traditional to the modern. Though outside influences may have changed the physical ways of living, they have not substantially changed the culture.

Fa'asamoa is essential to any Samoan wanting to remain in touch with his or her heritage. It reveres God and family above all else. It teaches the younger generations about respecting and honoring elders; and about being proud of their culture, who they are, and where they come from. Above all, it builds a firm foundation that allows families to remain so closely connected that no distance can truly separate them. *Fa'asamoa* encompasses much of what Samoan society is about: the *'aiga* [the extended family], the *matai* [chiefs], the *nu'u* [village], and the church. These groups, which work for the betterment of the culture, form the basis of Samoan social organization. Without them the culture would fall apart. It is imperative that we understand these systems and *fa'asamoa* before designing an evolving family compound in American Samoa.

Organization of Samoan Society

Family Structure:

The ‘*Aiga*

Samoan societal structure begins with what is the core of most households: the family, or ‘*au‘aiga*. It consists not only of parents and siblings, but also of aunts, uncles, cousins, and grandparents, including those related by adoption and marriage. Members of the group rely on one another for social support. As such, the *‘au‘aiga* places great importance on sharing, particularly of food, shelter, money, and land. This type of sharing—not just between individuals, but also among family and community members—gives meaning to *fa‘asamoa*. The *‘au‘aiga* makes sure that none of its members go without, because it is the group’s mission to ensure that all are taken care of and that the family never reaches a point where its resources are depleted.

The ‘*aiga potopoto,* or extended family (‘*aiga* for short), is not unlike the *‘au‘aiga;* it just casts a wider net. The ‘*aiga potopoto* includes not only family members who live in Samoa but also those who live in Hawai‘i, California, New Zealand, and other parts of the world. Regardless of distance, these family members find ways to connect with and support their families in Samoa and abroad. Yet the ‘*aiga potopoto* remains strongly tied to Samoa and *fa‘asamoa*. Most ‘*aiga* members can trace their linage back to common ancestors and are associated with a specific village where those ancestors first lived. Samoan children can trace their linage back on either parent’s side of the family through the long lines of chiefs associated with the family. It is the ‘*aiga*

that makes up the *nu'u* [village], and within this context, it provides a refuge for '*aiga* members in need.[19]

The *Matai*

Every '*aiga* has at least one *matai,* or chief. A *matai* is the voice of the family; they are the person with whom "to discuss family affairs or any happenings affecting the interests of the family, or to discharge the duties associated with deaths or weddings."[20] The *matai* ensures that the '*aiga* is doing well. But this is only part of the *matai's* role. Bradd Shore, an anthropologist and professor, puts it this way: "If asked to suggest the single most important pillar upon which their culture rested, most Samoans would probably respond without hesitation that it was their system of chiefs."[21] In Samoa a chief is both a leader of a village and a leader of a scattered group of people who share a specific bloodline. "In Samoan thought, the *matai* is an association of a name and a person."[22] Indeed, upon being given such a title by his or her family, the *matai* takes on the name of a revered ancestor. This naming carries with it the responsibilities of chiefly duties that have been passed down by a long line of *matai* who have carried the same title. It is important to note, however, that it is the title and not the individual that bears power.

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[19] Fiauai, Loia and Tuimaleali'ifano, Vao'au. Samoan Cultural Values (Honolulu: Honolulu District Office/Farrington Community School for Adults, Dept. of Education, State of Hawai'i, 1997). P.4,5

[20] Grattan, F.J.H.. An Introduction to Samoan Custom (Apia: Samoa Printing and Publishing Company Ltd., 1948). P.10

[21] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.59

[22] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.82

All chiefs in Samoa share the honor, dignity, and authority that a chiefly title encompasses. But *matai* are different in that they are ranked in status, rendering some lesser than others. Their prestige and power in the village varies, and some have more authority and a more active voice in meetings than others.

Matai are divided into *tulafale* [the orators] and *ali'i* [the high chiefs]. The *tulafale* speak on behalf of the *ali'i*, but they are the ones who hold the real day-to-day power. These roles are more political, since in the home a *matai* is simply the head of the household for the *'au'aiga*. The *matai* is responsible for assigning tasks, receiving food and monetary assistance from family members, and maintaining control of the family lands associated with their title. Whether inside or outside the home, however, the *matai* is the one who helps to keep the peace within Samoan culture, the one who helps provide for all who are under his control.

The Village

In Samoa a village is comprised of families who come together to form the organizations that maintain peace and harmony:

> To understand a Samoan village is to recognize its dual character, on the one hand, a village is a loose confederation of distinct descent groups. On the other hand, the village constitutes a set of village-based organizations that cross-cut families and demand allegiances to the village as a corporation in its own right.[23]

Village organization doesn't relate as much to the layout of the village as it does to the organizational order and different organizations that constitute the village and dictate

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[23] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.99

village life. The *nu'u,* or village, is regarded more as a series of social structures that allows different social groups to make decisions that affect the whole village. According to Shore,

> when someone in Samoa suggests that a certain village is strong in Samoan custom, the implication is usually that there is a vigorous *matai* system at work there, and also that the village contains a full complement of traditional organizations through which important public works projects are carried out.[24]

The two main village organizations are *'o le nu'u o ali'i* [the village of men] and *'o le nu'u o tama'ita'i* [the village of women]. These sub-divisions of the village as a whole are "not measured in territorial or spatial dimensions but in the division of labour and spheres of influence between males and females."[25]

The most important component within the village men's organizations is the council of chiefs. It combines the executive, legislative and judicial bodies, and it is "the ultimate authority in village affairs, and the chief representative in intervillage or district matters."[26] The council of chiefs has several sub-committees, including the hospital committee, the local school committee, the water pipe committee, the electric generator committee, and the committee of the village. These address specific issues within the village.

The other organization that assists the chief council in running village affairs is the *'aumaga* [the un-titled men's organization]. This organization is called the strength of the village, and it serves not only to assist the council of chiefs but to also help young

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[24] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.98

[25] Schoeffel, Penelope. "Daughters of Sina: A Study of Gender, Status, and Power in Western Samoa," PhD Diss., Australian National University, 1979. P.33

[26] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.99

men develop the political, oratorical, and social skills they will need when they someday become *matai*.

The women's committee, or *komiti tumama,* ensures that the village is presentable to the public. Three main sub-committees, the sanitation committee, the latrine committee, the bathing pool committee, and the hospital committee, help to oversee village sanitation. There is also a committee comprised of the wives of the chiefs called the *faletua ma tausi,* whose main purpose is to provide "village-wide leadership" over women's village activities.

The other main women's organization is the *aualuma* [the organization of village girls], which is similar to the un-titled men's organization, except that one of the main responsibilities of the *aualuma* is to provide entertainment for guests. It is important to note that the women in the *aualuma* are village-born; those in the *faletua ma tausi* are usually outsiders; and those in the *komiti tumama* are a mixture of both.

The last but not least of the major organizations are those of the church. Both the seals of Independent Samoa and American Samoa reference the Christian God: "*Faavae i le Atua Samoa ma Samoa Muamua le Atua*." Translated, this means, "Samoa is founded on God and Samoa, Let God be First." The church is of great importance not only to the village unit, but also to all of Samoa. The *'aulotu,* or church congregation, is in a sense a mirror of the village, or *nu'u,* as a whole. The *'aulotu* helps with the upkeep of the church building, and its members actively participate in all church-related activities. This organization is important, as it is the church family that assists in the development of the younger generation, helping them to learn the appropriate ways of acting and speaking as

they grow older and move into positions where they must represent their families and communities.

The *'autalavou,* or youth group, is in charge of group activities such as sports events, dances, and fundraisers. The group hosts visiting church groups and helps maintain the church grounds. The *'autalavou* is also instrumental in the development of younger generations, as it helps to teach and ensure the continuation of cultural practices and customs. In a way, the *'autalavou* mirrors village organizations that help to facilitate different events in the church for the benefit of the village as a whole.[27]

The last of these groups is that of the *a'oga faife'au,* or pastor's school, which can also be considered Sunday school. This is where young village children come on Sundays to learn about the Bible from the pastor and his wife. They learn reading and writing, as well as basic manners and styles of speech. This is all part of the pastor's responsibility.[28] In this way, Sunday school mirrors the roles of the *'aumaga* and the *aualuma,* in which younger generations gain the knowledge they will need to contribute to Samoan society. Sunday school helps preserve Samoan culture by teaching children about the foundations of Samoan beliefs and lifestyle, God, and *fa'asamoa*.

For those living outside of Samoa, the church is a surrogate village. It is a place where they can congregate with other Samoans, a place to connect with their culture on an almost daily basis. It is a place for younger generations to grow stronger in their faith and sharpen their knowledge about the Samoan culture, lifestyle, and language.

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[27] Lesa, Faafetai. "The Impact of Samoan Christian Churches in Samoan Identity," PhD Diss., University of Hawai'i, 2009.

[28] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.99-106

A Samoan village is much more than its buildings; it is the many different organizations of people that constitute the village. Without the people and the work they do in these organizations, there would be no village and, in turn, no need for the buildings in which they live, work and play.

Roles in Samoan Society

Roles in Samoan society are divided among young and old, high chief and orator, brother and sister, male and female, husband and wife. These roles dictate how community and individual tasks are completed, and who completes them. They also determine the allowable age for participating in certain activities, and regulate interactions between men and women at certain phases of their lives. The successive relationship and role changes that occur throughout the life of a Samoan growing up in Samoa begin with the distinction of age. Samoan children are expected to help with chores, and, more importantly, to assist in giving *tautua,* or service to their elders.

According to Penelope Schoeffel, an anthropologist from Australia National University, "Children are ordered into small caretaking hierarchies by the older members of the household."[29] The oldest child is expected to look after the next-oldest; accordingly, a younger child is expected to yield to his or her next in line elder in terms of behavior, chores, and service. Children under the age of ten are assigned household responsibilities according to ability rather than gender. These responsibilities change when children reach the age of ten and gender begins to play a bigger role in their duties

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[29] Schoeffel, Penelope."Daughters of Sina: A Study of Gender, Status, and Power in Western Samoa," PhD Diss., Australian National University, 1979. P.106

and expected behaivor, with girls being expected to do more household work and boys pushed out of the house into plantations, the bush, or the fishing business.

Schoeffel says that although these more formal changes do not occur before the age of ten, the separation of gender interests still takes place at a young age, when boys become interested in the work of men and male youth—work they are allowed to watch but not necessarily to participate in. Upon reaching the age of ten, girls begin to take on roles similar to those they will perform as women. This does not happen as quickly with the boys, as most men are out in the plantations or have more important matters to attend to than teaching the smaller boys, so they turn to their older brothers for guidance.

Although Samoan children are sent to school, they are also expected to learn at home, through observation. It is in this fashion that they acquire most of the cultural knowledge associated with being Samoan. They learn, for example, how to act and interact with their elders—not only their older siblings, but also parents, aunts, uncles, grandparents, and other non-related adults. Schoeffel gives the following summary:

> By this age children have also learned basic Samoan etiquette and will stop and excuse themselves when it is necessary for them to walk in front of a seated person; to sit or kneel beside a person who calls them, before speaking, to refrain from eating or drinking while standing or walking, and a wide range of other polite behavioural expressions and avoidances.[30]

Because seating arrangements in the *fale* are determined by rank and by who is present at the time of a certain meal or event, children learn about rank in the household by watching members of the family take their seats during prayer times and meals.

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[30] Schoeffel, Penelope. "Daughters of Sina: A Study of Gender, Status, and Power in Western Samoa," PhD Diss., Australian National University, 1979. P.130

On the subject of relationships between brothers and sisters, Schoeffel says that "Samoans consider that the proper relationship between a brother and a sister should be one based on mutual respect and that the interaction between them should be restricted and formal."[31] There is a Samoan saying that goes, "*o le teine o le 'i'oimata o lona tuagane,"* which means, "A girl is the inner corner of her brother's eye." In other words, a girl is the representative of her brother, and because of this, she is honored by him.[32] This relationship gives her a higher status than her brother and gives her privileges over sleeping space, seating, and work. Indeed, a brother's respect for his sister obligates him to carry out any duty his sister asks of him. He must ensure the prestige of his sister by fulfilling her wishes. Brothers, however, are given free range to do as they please, while sisters are submitted to many restrictions.

These roles, which shape the everyday lives of Samoans, are integrated into the layout of the Samoan housing. The main *fale* sits at the front, facing the *malae*. Other housing structures, such as the guest *fale*, the cooking *fale,* and the bathrooms, are added toward the back. A hierarchy of structures begins to take shape, as does a hierarchy of social roles. Women are in charge of the main *fale* and guest *fale,* and men take care of the cooking and other duties associated with the bush. Status and rank—within immediate households and within the village—also determine responsibilities and domains. For example, the *faife'au* serves the village people as a guide to living in Godly

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[31] Schoeffel, Penelope. "Daughters of Sina: A Study of Gender, Status, and Power in Western Samoa," PhD Diss., Australian National University, 1979. P.166

[32] Schoeffel, Penelope. "Daughters of Sina: A Study of Gender, Status, and Power in Western Samoa," PhD Diss., Australian National University, 1979. P.166

ways, whereas the chief's role is to ensure that his family is represented in village councils and other important village events.

The roles and relationships within Samoan society are implemented from birth until death. An integral part of *fa'asamoa*, they define social and spatial interaction in Samoan culture. Although modernization is changing many of these roles, they remain an important influence on Samoan culture and architecture.

The *Fale* (The Samoan Building)

The Manu'an version of the creation story of Samoa tells us that Samoans were among the first humans to create architecture, making them the first people to build houses or, more specifically, *fale*. Tradition according to Turner holds that the Samoan forefathers had no houses: "They say that in those days the people were 'housed by the heavens.'" The first chief to build houses "had two sons, and out of love to them built for each of them a house."[33] Turner implies that it was this particular chief's ingenuity that allowed him to create the first two houses in existence.

Alessandro Duranti, an anthropologist and professor with a specialty in Samoan and south pacific cultures, describes Samoan houses as being "part of family compounds where extended families … live under the jurisdiction of at least one titled person."[34] One such house, the *fale*, can be of different types and sizes and have different uses. Mostly round or oval in shape, *fale* are constructed using the wood of the breadfruit tree for posts, rafters, and beams. Posts are organized in a curved form with two or three posts in

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[33] Turner, George. Samoa: A 100 Years and Long Before (London: Macmillan and Company, 1884). P.152

[34] Duranti, Alessandro. "Language and Bodies in Social Space: Samoan Ceremonial Greetings," American Anthropologist (1992): 657-961. P.666

the middle to help support the higher part of the roof structure. Cross beams and rafters are used to create the structure for the roof. Roofs are made of thatching consisting of fringed reeds and *lau tolo,* or sugar cane leaves; these are typically sewn together for better durability. Floors are usually covered using old coral, small stones, or concrete.

There are two main kinds of *fale*: the *fale afolau* [long house] and the *fale tele* [round house]. There is also a rectangular *fale,* or *fale palagi,* but this structure is less common when speaking of traditional Samoan *fale*. For the most part, both the *fale afolau* and the *fale tele* are wall-less, except for the *pola* [blinds] that are lowered to protect the interior from direct sunlight, rain, and winds, and to provide privacy at night. The *fale tele,* being round in shape, tends to be less common, and is used specifically for hosting significant community events, such as *fono,* or for welcoming a *malaga,* or traveling party. As stated by Duranti, "houses in Samoa both imply and help make explicit a set of expectations about the social system and the people's relationships with one another."[35]

The expectations that Duranti refers to are of hospitality and generosity—inviting guests or outsiders into the *fale* for a meal or to rest. In other words, the wall-less houses allow for open and welcoming relationships among family, friends and villagers. "Thus the Samoan house is a primary locus of socialization … where they first observe and then progressively engage in culturally appropriate activities (cf. Ochs 1988)."[36] This is of particular importance for children, who observe how older generations interact and then

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[35] Duranti, Alessandro. "Language and Bodies in Social Space: Samoan Ceremonial Greetings," American Anthropologist (1992): 657-961. P.666

[36] Duranti, Alessandro. "Language and Bodies in Social Space: Samoan Ceremonial Greetings," American Anthropologist (1992): 657-961. P.666

take part in these same interactions as they grow older and begin to understand the formalities that take place within the social scene of the *fale*.

Although the *fale* is visually a simple building structure, it becomes quite complex when considered in terms of its construction and the social and spatial interactions that take place in and around the building. It is the structure in Samoa that represents all aspects of Samoan culture.

The *Fale* (Past, Present, and Future)

Different versions of the Samoan creation myth cite Samoans as being instrumental in the creation of architecture. The following version, told by Lowell Holmes, describes how the creator Tagaloa was concerned with what materials to use to form the first structure. "He resolved that he would build it out of people. So a group of people were instructed to form a circle, thus providing the posts. Others were directed to climb on their shoulders in order to form the parts of the roof."[37] Holmes goes on to describe that Tagaloa, feeling that the *fale* needed more structural support, used more people to create the rafters and cross beams, which were necessary to ensure the strength of the building. When he was done and very much satisfied with his creation he decided it would be better to use wood, so the people climbed down and the *fale* was then constructed out of the wood from the breadfruit tree.

Guernsey offers another explanation:

> In this myth, humans are directly linked to the creation of the *fale*. They are seen not as the agents of construction but the actual components of the house. In this way house and

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[37] Holmes, Lowell D.. Samoan Village (New York: Holt, Reinhart, and Winston, Inc., 1974). P.52

> humans become analogous. The people used in the fabrication are not isolated individuals but are linked together in a series of relationships. Such human relationships are seen as necessary for the shape and the stability of the house. Ultimately the breadfruit wood replaces the initial living materials. However the *fale* remains both manifestation and sign of a community of people linked together in a strong group.[38]

Not only were Samoans the architects, but they were also the very materials with which the *fale* was constructed. "The house as a symbol thus functions to define both members and non-members, us and them."[39] "Them," in this case, refers to the Samoan people ,who were endowed with the ability to "create meaningful, productive space."[40]

While the uses of a Samoan structure dictate its shape, the many cultural aspects that constitute the Samoan lifestyle dictate the way the space is used. Without the cultural influences, the structure would not have a purpose. All the activities that go on within the home, for instance, dictate how a *fale* is used.

Nearly all *fale* have certain characteristics that dictate the way people enter, where they sit, and how the space is used at certain times. For example, there is a side of the *fale* reserved for visitors and a side for the receiving family. But overall, it is a space that is used for small family meetings, eating, and sleeping.

Most *fale* are open to the elements for several reasons. The main reason, however, is the climate: in Samoa the temperature and humidity are usually high and constant, and comfort depends on the movement of air. The location of the *fale* on the island—whether

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[38] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.43

[39] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.58

[40] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.35

it's on the mountain or closer to the sea—will also affect air movement. Wall-less structures, no matter where they are located, maximize ventilation and, therefore, comfort.[41]

Wall-less houses also "allow for continual community observation of behavior and support shared responsibility for socialization through collaborative work and space."[42] Here, "community observation" refers not to critiquing others, but to keeping one's own actions in check. This is especially important because, according to *fa'asamoa,* the actions of an individual reflect on the family, the extended family, and ultimately the village as a whole. If one person acts out of place or does something wrong, the whole village can end up suffering the consequences. Within the home, support and shared responsibility are essential in that children and family are always being looked after. It is not unusual for children to end up sleeping and eating with families other than their own, since in Samoa it is the village as whole that helps raise the children.

Construction Methods (Past)

The construction of a *fale* starts with the commissioning of a *tufuga fa'i fale* [the master builder, architect or carpenter] by someone in need of a house. The carpenter, along with the others, then goes into the forest to select and bring down trees that will be used in the construction of the *fale*. "The division of space as represented in the physical construction of a *fale afolau* or a *fale tele* cannot begin without the erection of a

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[41] Grattan, F.J.H.. An Introduction to Samoan Custom (Apia: Samoa Printing and Publishing Company Ltd., 1948). P.4,5

[42] Rohlinger, Claire. "Residential Design for the Samoan Way of Life," DArch Diss., University of Hawai'i, 2008. P.30

scaffolding."[43] The scaffolding helps to support the central pieces of the house during the early stages of construction and gives builders a place to stand during the later stages. After the scaffolding is in place, the *tufuga fa'i fale* indicates to his workers where to place the posts. This is contrary to most construction methods, which first call for the laying of a foundation. A *fale Samoa* is constructed by setting up the wooden framework first and laying the stone floor at a later time. The architect or carpenter must therefore take this height into account when setting the initial posts.

The *pou tu,* or posts, create the stationary stability of the house. The placement of these posts helps to define the front and back boundaries of the center of the house. The *itu,* or sides, then help establish the spatial periphery. The *amo pou,* or main plates, are then placed on top of the main posts lengthwise and lashed together. Next, the *utu poto,* or crossbeams/joists, are placed at right angles on top of the plates and also lashed into place. It should be noted that the " joists and plates are never of the same material as the main posts."[44]

The *tuitui,* the heavy longitudinal beam that runs the length of the frame, is placed on top of the crossbeams. On top of the *tuitui* go the *te'e auau,* or the uprights that help to support the *auau* (ridgepole), which is lashed into place next. Extending from the end of each main post across the ridgepole are the *fatuga,* or flat oblique rafters, which are made of coconut wood. Next, the *so'a,* or horizontal rafters, are put in place. These run the width of the roof. When all of the *so'a* are in place, the *taotao* are placed, one on each

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[43] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.112

[44] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.6

side of the *fale*. These are two rafters that are lashed on top of oblique rafters. The *aso,* or small ribs, are placed on top of the *taotao* from the top of the roof to the lower region over the whole frame.[45]

Now the *puo lolo*, the small outside posts, are placed. These run along the length of the roof. "The main body, or central section, of the house, comprising two straight sections of side roof supported by two rows of main pillars and two rows of low outside pillars, is now complete."[46]

Next the two curved ends are added one end at a time. This begins with the *fau,* or round rafters, which comprise the main elements of the ends of the *fale*. After these have been placed and are held together by temporary supports, the *moamoa,* a small, flat, round or rectangular block of wood, is lashed to the end of the ridgepole. The *moamoa* is usually carved and may contain "symbolic representation of the moon and stars."[47]

Thatching, which is made by women and lashed in place by men, is placed on each end as the framing is finished. The thatching is made of sugar-cane leaves and dry reed stems. These are usually about 3 feet in length and are lashed on to the "house frame one above the other as closely as can be laid in successive strips or sections from the eaves up to the ridge, one row being finished before the next is started."[48] Just above the ridgepole is the crest, covered by loose coconut leaves upon which coconut leaf mats are

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[45] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.7

[46] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.8

[47] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.9

[48] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.9

placed in layers. These run the entire length of the ridge and are held in place by small sticks that cross from one side of the thatching to the next. This process of placing the crest is called *tauaIuga*. The thatching is then trimmed at the eaves.

The last steps are to create the coconut leaf blinds or screens (*pola*) that close the sides of the house, and to create the stone platform and the pebble floor of the house. The screens are small mats, usually about 18 inches in width, tied together in such a way that they overlap each other when raised and sit nicely when lowered. The stone platform and flooring are not laid until after the house has been finished. The *paepae ma'a,* or platform, is one layer of round stones that covers the ground about 2 feet deep beneath the house. These are usually finished using coral blocks and sometimes concrete. The floor inside the *fale* itself consists of *iliili,* or black pebbles, that evenly cover the platform. Residents usually cover these with mats of pandanus leaves used for sleeping, sitting, and other daily activities.[49] The construction of a *fale* may differ slightly depending upon the shape, but for the most part the process is similar.

Construction Methods (Present)

Fale today are similar to traditional *fale* with the exception that they are constructed using modern materials, and their main purpose is usually to host meetings, although some are still used for daily activities and sleeping. Floors are usually concrete poured in place with concrete posts as the main structural supports. Inside, structural rafters and beams are made of wood, but are connected using modern supplies such as

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[49] Handy, E.S. Craighill and Handy, Willowdean Chatterson. Samoan House Building, Cooking and Tattooing (Honolulu: Bernice P. Bishop Museum, 1924). P.11

heavy-duty nails, screws, nuts, and bolts. The roof is made out of corrugated aluminum and is usually painted on the exterior. Many may have lights and electricity so the *fale* can be used at night.

The main difference between present-day *fale* and historic *fale* is in the materials. The spatial and social relationships, however, are maintained, which suggests that although modern *fale* differ aesthetically from traditional *fale*, their purpose remains the same.

Modern Impacts and Issues relating to *Fale* and Samoan Architecture

Changing times have positively and negatively affected Samoa. With the arrival of foreigners came Western-style houses, new building materials, and new tools. Foreigners also brought with them the practices of the outside world, including animal poaching (the Samoan flying fox was at one time on its way to being on the endangered species list because it was being hunted for exportation) and logging (which also threatened the flying fox by destroying its natural habitat).

With global climate change came hurricanes and severe thunderstorms that destroyed villages, created landslides on logged land, and destroyed the natural resources and materials Samoans used to build their *fale*. Over time, construction techniques and materials changed so much that many Samoans no longer live in traditional *fale* but in what they call *fale palagi,* or Western-style houses. *Fale* originally made of wood have become more permanent concrete structures, consisting of harder surfaces and blending in less with the environment. Roofs are now made of corrugated tin and have nets over them to discourage birds from sitting on them.

Fale palagi also impact how Samoans live in the islands of Samoa. These "new" building types have damaged the sense of community and public awareness that traditional *fale* naturally instill. Where traditional *fale* (wall-less *fale*) invite neighbors to interact on a constant basis, to help each other out, to share, and to mind their manners, *fale palagi* encourage isolation, selfishness, and at times, improper behavior. Where traditional *fale* are naturally ventilated, *fale palangi* require man-made alternatives like air-conditioning.

One of the main culprits in the transition from traditional *fale* to *fale palagi* has been the hurricane. After the devastation of hurricane Ofa (1990) and hurricane Val (1991) in the islands of American Samoa, the easiest and most convenient solution for most families was to build Western-style houses. The U.S. government sent aid in the form of loans to assist families in building hurricane-proof shelters. With most of the traditional building materials gone, Samoans used modern materials to build strong solid homes they hoped would have a better chance of surviving another storm.

These events have changed *fale* building and have thus changed Samoan architecture. Consequently, the spatial relationships created in and encompassed by Samoan architecture will change. New Samoan architecture can recreate these spatial relationships with new methods and materials, and without losing sight of the traditional purposes that are essential to the culture.

Chapter 2

Samoan Spatial Relationships

"Important to the Samoan view of reality is the concept of *Va* or *Wa* in Maori and Japanese. *Va* is the space between, the betweenness, not empty space, not space that separates but space that relates, that holds separate entities and things together in the Unity-that-is-All, the space that is context, giving meaning to things. A well-known Samoan expression is *'Ia teu le va*.' Cherish/nurse/care for the *va*, the relationships. This is crucial in communal cultures that value group, unity, more than individualism: who perceive the individual person/creature/thing in terms of group, in terms of *va*, relationships." (Wendt, 1996).

Samoan Spatial Relationships

Albert Refiti, Samoan architect, artist, researcher, and professor at Auckland University of Technology in New Zealand, describes *va* as "a spatial ordering concept that exists between things and administers a code of good (ideal) behavior, an invisible language that enables space and things to be configured in a positive manner."[50] It "refers to the 'betweenness' of things that binds those things together in a relationship."[51] It is not an empty space or a space that needs filling, but a space where connections are made, where identity is discovered, and where relationships are strengthened. It is a place of substance, respect, and context; it symbolizes what is not seen.[52] It is *va* that allows

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[50] Refiti, Albert, "Making Spaces: Polynesian architecture in Aotearoa New Zealand," Pacific Art Niu Sila: the Pacific dimension of contemporary New Zealand arts, ed. Sean Mallon and Pandora Fulimalo Pereira (Wellington: Te Papa Press, 2002).

[51] Van de Ryn, Micah, The Measina of Architecture in Samoa (National University of Samoa, January 2007) P. 2

[52] Simati, Benita, Lala-Va: The notion of stirring the relationships of SPACE (Auckland University of Technology, November 2009) P. 2

things to exist. The conceptual space of *va* "perceives space as points and their inter-relationships … rather than an area contained by a boundary"[53] Thus, when a chief enters a traditional *fale* where other chiefs are already seated, he instantly knows where to sit based on the positions of the already-present chiefs and their locations within the *fale*. Lemi Ponifasio, a Samoan choreographer and dancer, explains that "the concept of Samoan existence is called *va* … it means space and it means we are always negotiating the truth at that moment. Nothing is absolute. A Samoan house is a good example of this concept. It's open, there's no privacy; you have to negotiate how you exist in that." [54]

Traditional Samoan *fale* helped *va* to remain an essential part of the Samoan lifestyle. Open structures required residents to constantly be aware of their actions, thus ensuring the stability of the *va* relationships in the community. *Va* relationships allow for things or entities to be present in the world; they "[allow] the housing between past, present, future to appear."[55] So in order to merge past, present, and future Samoan architecture, the architect must keep *va* as part of its grand design, refolding the layers and relationships of Samoan culture to allow the architecture to inhabit the present.

In the Samoan culture, structures have very specific uses, and the interaction that takes place within these structures dictates their size and form:

> Any study of Samoan architecture must consider the nature of the constructed space: its dimensions, organization, contents, process of construction, and interactions with the other domains within the Samoan world. In Samoa buildings are embedded in a

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[53] Van de Ryn, Micah, The Measina of Architecture in Samoa (National University of Samoa, January 2007) P. 3

[54] Mallon, Sean, Samoan Art & Artists: O Measina a Samoa (Nelson, N.Z. Craig Poton Publishing, 2002) P. 207

[55] Refiti, Albert, "The Forked Centre: Duality & Privacy in Polynesian Spaces & Architecture" Alternative: An International Journal of Indigenous Scholarship, (Nga Pae o te Maramatanga Publishing, 2008) P. 99

> configuration of interlocked spaces (physical, temporal, social and conceptual) which provides the setting for human habitation.[56]

The social uses of a Samoan building define the structure of the space, and vice versa. Guernsey states that

> The social space becomes defined and described through its verbal association with physical structures. In turn these structures derive meaning from their societal context. In regard to the family (and on a lesser scale the village) architecture is a central Samoan linguistic metaphor for the underlying spaces, replicating verbally the social and spatial boundaries which are visually and physically signified by the *fale* itself.[57]

The architecture is what forms the social spaces in which Samoans are allowed to interact, and this in turn dictates how they behave within these spaces. Social context also defines architecture. In Samoan culture, what you do within and around an implied or physical space is what gives the space its significance. The verbal and visual boundaries created by the *fale* help to delineate the interaction between a chief and a commoner or an elder and a child. In a culture where these roles are taken very seriously, the architecture helps each party to understand their role and play their part accordingly.

It is important to highlight not only the structure of the Samoan building, but also the interaction that takes place among villagers, families, and individuals. We often limit our understanding of architecture to the buildings themselves, without realizing the importance of the social interaction that takes place within and immediately outside the structure.

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[56] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.2

[57] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.62,63

One of the structures that foregrounds the importance of space is the *fale talimalo,* also known as the meeting *fale*. It visually represents status and lineage in Samoan culture: the arrangement of people dictates the social interaction that takes place there. It is the *fale* where *fono* [meetings] of a family, village, district, or national group are held to discuss important matters or come to a consensus on a decision. *Fono* have helped to preserve the Samoan way of life since the beginning of time. According to mythological history, it was "after the creation of the second generation of gods, [that] Tagaloa the Creator sent out Tagaloa the Messenger to visit all the realms of the sky and to call their inhabitants to a *fono* (formal meeting) convened in the ninth heaven."[58] According to Guernsey, "emphasis on the spoken word and its power to bring about productive space can be found in the strong ongoing tradition of Samoan oratory,"[59] which takes place at most major *fono*. This cultural-political system has helped to keep peace and order within Samoan society. Meeting *fale* are organized in such a way that each high-ranking chief attending the *fono* has a post to sit against. The chiefs of lesser status often have to sit between posts, in the back, or outside the *fale* on the surrounding grass. Rank dictates where chiefs sit in the *fale,* the order in which they are served *'ava* (a Polynesian drink) during the *'ava* ceremony, and the way in which they are greeted and greet others upon entering the *fale*.

The relationship between the *fono* and and the *fale* is also evident in Samoan ceremonial greetings. These complex greetings indicate the status of *matai, ali'i,* and

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[58] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.35

[59] Guernsey, Anne Elizabeth. "Space as Social Construct: The Vernacular Architecture of Rural Samoa," PhD Diss., Columbia University, 1993. P.41

commoners. They are essential to the social and cultural organization of the space inside the *fale*. According to Duranti, Samoan ceremonial greetings

> show that the combination of particular architectural choices (e.g., the shape of the house), cultural understanding of such choices (e.g., local spatial distinctions and oppositions), and ways of acting in them are indeed essential elements of any account of social life in a given community.[60]

Those entering the house decide where to sit based not only on the shape of the house but also on who is already seated and where they are sitting. In this way, the ceremonial greetings impact how Samoan society uses an architectural space.

Village and *Fale* Spatial Organization

Samoans use social space as a form of organization. This organization in turn delineates the importance of spaces and their uses. For example, the village is divided into zones containing a center and a periphery. The focus of the village is the *'a'ai*, the residential core. Most Samoan villages are therefore organized in a circular, rather than linear, pattern. The *malae* is the sacred political ground that is deemed the center of distinguished activity. Just outside this center is a circle of *fale tele* and meeting *fale,* along with smaller *fale* that move farther out toward the periphery and lead outward toward other villages, the bush, and the sea.[61] Shore says that "village regulations tend to be more rigidly enforced in the core, and the traditional etiquette is frequently specified as applying only to the core and more especially to the *malae*."[62]

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[60] Duranti, Alessandro. "Language and Bodies in Social Space: Samoan Ceremonial Greetings," American Anthropologist (1992): 657-961. P.684

[61] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.50

[62] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.50

The organization of a village is based on *tai* and *uta* [seaward and landward] directions. Symbolically, *'i tai* [toward the sea] gives representation to "the more populated and ordered arenas of Samoan life."[63] According to Shore, *'i tai* represents the more public side of Samoan culture. It is the side in which work is cleaner and lighter and done mostly by women, the side where behavior is regulated by watchful village eyes. It is the side in which "the *fale tele* [guest house] of each household is positioned seaward of the compound's other houses, and it is here that important guests are housed, important meetings are held, and ideally where the girls of the family are supposed to sleep."[64]

'I uta [toward the rear of the village], on the other hand, is associated with the bush and indicates the places where the *aitu* [ghosts] live. *'I uta* represents the heavier, dirtier work done mostly by men. It is further from order and control. "Positioned *'i uta* in the household compound are the *fale o'o* [small sleeping huts] in which the young men normally sleep … Guests are entertained on the seaward side of the compound, and are discouraged from wandering to the back of the compound."[65]

Specifying the direction in which buildings should face and defining the actions that should take place within them suggests that directions in Samoan culture largely determine how one should act and, more importantly, how one should live. Both *tai* and *uta* attest to the way in which social spaces within and around Samoan architecture dictate how spaces are used and, therefore, how they are created.

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[63] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.49

[64] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.49

[65] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.49

Samoans are encouraged to be proud of their culture and to behave respectfully at all times, because all actions represent both the individual and the culture as a whole. In this way, Samoans live their lives not in a physical place of *'i tai* and *'i uta,* but in a mental space in which their daily decisions and actions are *i'tai* and *'i uta*. The structures they live in, then, should represent the way in which they live.

Other advantages of this orientation include visibility and the conservation of building materials, since walls are neither required nor desired. Privacy in the village is not easily attained, except via coconut-leaf blinds or modern-day plastic tarps that can be lowered and raised just outside the *fale*. Yet these blinds are rarely lowered for fear of gossip and suspicion of theft, improper behavior, not sharing, concealing something, or breaking village rules. Wall-less houses don't impede privacy as much as they help to maintain cultural communal boundaries. "The loss of privacy in a Samoan *fale,"* Cox says, "is compensated [for] by a constant connection to nature as well as community."[66] He goes on to compare Japanese houses with Samoan *fale*: "the Japanese house is designed to give the illusion that one is within nature; the Samoan *fale* delivers the reality. From within our *fale* we had a constant 360-degree view of the environment."[67]

The structure of the *fale*, rather than fostering nosiness, encourages people to be humble and mindful of their behavior. It emphasizes the relationships between people and their community, and allows for "a constant connection to nature"—not just through natural ventilation or visual accessibility, but through keeping the outdoors within arms' reach and sometimes even allowing nature into the structure. Through this ever-present

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[66] Cox, Paul Alan. Nafanua: Saving the Samoan Rainforest (New York: W.H. Freeman and Company, 1999). P.32

[67] Cox, Paul Alan. Nafanua: Saving the Samoan Rainforest (New York: W.H. Freeman and Company, 1999). P.32

connection, Samoans honor the cultural and historical relationships among man, earth, and structure.

Samoan culture places great importance not only in the seaward and landward orientation of village life, but also in the idea of a center and the significance of that center to the buildings that extend outward from it. Within the *fale,* spatial distinctions are made between the *'i tua* [back] and the *'i luma* [front] of the house. For example, the front of the house is seen as the more public realm, where guests are received. It is the job of lower-ranking individuals—usually the younger generation—to remain in the back, ready to serve arriving guests or elders. Shore states that "to be up front is to be in a public, dignified context, the focus of control, and is thus to be cautious and on one's best behavior."[68]

The importance of *'i luma* and *'i tua* begin to carry more significance in the context of the *fale* when the concept of *tautua,* or service, is introduced. Since those of lower rank are the ones associated with *'i tua,* they are therefore associated with *tautua* as well.

> *Tautua* is a Samoan term that describes unselfish service to family and community … for islanders, *tautua* is an expression of love, respect, and commitment, it is an important part of *fa'asamoa* and what binds Samoans together as community though far from their island homes. Its a cultural trait that is highly valued, *tautua* is both respected and expected.[69]

As Koletty explains, *tautua* is seen as an unselfish service, and all Samoans, no matter how far from Samoa they are, are expected to give *tautua*.

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[68] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.51

[69] Koletty, Stephen. "The Role of Circulation in the Modernization and Spatialization of Fa'asamoa," PhP Diss., University of Southern California, 2000. P.69

Tautua helps organize spaces within the home. It also teaches younger generations about humility and service, and delineates which spaces they are allowed to be present in during different stages of their lives. Although *'i tua* in Samoan culture may relate to less graceful work in a less appealing setting, it is through *'i tua* that that which is *'i luma* becomes more graceful and dignified. It is through *tautua* that a Samoan works his or her way up from being someone ostensibly insignificant to one day being the *matai* of their family or the *ali'i* of their village. Samoans say, "*'o le ala i le pule 'o le tautua*," or, "the path to power is through service."[70]

The principal concepts that structure a *fale* are represented by the dualites that have been discussed: *'i tai* and *'i uta*; *'i luma* and *'i tua*; good and bad; clean and dirty. These are the structures of the Samoan lifestyle and, thus, the structures that define their buildings. To represent these structures in architecture is to create a space that speaks of one's beliefs and way of life, to constantly be reminded of why you live and what you live for.

The Modernization of *Fa'asamoa*

All cultures adapt to newer styles of living, working, and traveling. Although much has changed since the arrival of the missionaries, Samoans have found ways to adapt their traditions while honoring the importance and significance of the old ways. Koletty states that

> cultures are dynamic and responsive to change over time … if they are to survive they must respond to the social and economic challenges which now confront them … or do

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[70] Shore, Bradd. Sala'ilua: A Samoan Mystery (New York: Columbia University Press, 1982). P.64

> they find a way to appropriate elements of modern global (western) culture into their own traditions.[71]

As times changed, many Samoans began to leave Samoa, looking for a better life in places like New Zealand, Hawai'i, and California. These moves impact those who emigrate and also those who remain in the islands. Greater responsibility is placed on those who leave to provide for the families left behind. No matter the distance in Samoan culture, it is of foremost importance to maintain ties with the culture. Koletty says that "being a Samoan is not as much about ancestry as it is about maintaining social relations with *'aiga* and with other Samoans and following Samoan custom, *fa'asamoa*."[72] *Fa'asamoa* is so integral to being Samoan that no matter where you find Samoans, you will still be able to see some aspect of *fa'asamoa*. In a sense, *fa'asamoa* has changed with the emigration of Samoans to other places, but this "spatial expansion of the Samoan way of life" has made the "modernization of *fa'asamoa*"[73] easier. Instead of letting modernization change Samoan culture, Samoans have integrated modernization into their lifestyles, making possible the expansion of the culture and of the village as an entity that maintains Samoan customs and laws.

F*a'asamoa* has also adapted to the influence of outside cultures. It is very different in California and Hawai'i than it is in New Zealand and American Samoa; the differences are even more apparent in American Samoa and Independent Samoa. Many changes occur because of differing lifestyles and the availability of resources that are

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[71] Koletty, Stephen. "The Role of Circulation in the Modernization and Spatialization of Fa'asamoa," PhP Diss., University of Southern California, 2000. P.6

[72] Koletty, Stephen. "The Role of Circulation in the Modernization and Spatialization of Fa'asamoa," PhP Diss., University of Southern California, 2000. P.44

[73] Koletty, Stephen. "The Role of Circulation in the Modernization and Spatialization of Fa'asamoa," PhP Diss., University of Southern California, 2000. P.2

deemed part of Samoan ceremonies and protocol. Koletty elaborates: "In some ways *fa'asamoa* is more demanding in urban overseas communities than in Samoa. Los Angeles residents often complain, '*Fa'asamoa* is much worse here.' Samoan protocols are given greater emphasis. Some events are accorded ceremony and *fa'alavelave* which would not warrant such recognition in Samoa."[74] It is possible that because the ceremony is not happening in Samoa, there is a need or desire to over emphasize the culture, where as the same ceremony in Samoa might have a more simplified format.

Another example of this modernization is in the exchange of material or ritual goods at Samoan ceremonies. *Toga* or *'oloa* are the principal gifts exchanged by family members at weddings, funerals, and chief-naming ceremonies, or *saofa'i*. They include fine mats, food, and money. Although both fine mats and food have always been a part of this exchange, money is a newer introduction. Even the ways in which fine mats and food are exchanged have changed drastically. Fine mats, or *'ie toga,* have become more significant in Samoan ceremonies occurring outside of Samoa. For example, more mats are given at funerals outside Samoa than in Samoa. In Independent Samoa, one fine mat would typically be given to the grieving family by its church community, but outside Independent Samoa this number might be greater. Food given at a ceremony in Independent Samoa would usually consist of pig, cooked taro, breadfruit, and other cooked items; outside Independent Samoa these foods would be given too, but depending on their availability, canned goods might be substituted.

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[74] Koletty, Stephen. "The Role of Circulation in the Modernization and Spatialization of Fa'asamoa," PhP Diss., University of Southern California, 2000. P.99

The modernization of *fa'asamoa* is most evident when comparing and contrasting American Samoa and Independent Samoa. With the influence of the American culture, American Samoa has changed not only how they practice parts of *fa'asamoa,* but also how they live *fa'asamoa*. Independent Samoa, which has been modernized and influenced by Germany, New Zealand, and other places, has maintained its grasp on the *aganu'u* of Samoa ("*fa'asamoa"* being the modernized term for "*aganu'u").* In Independent Samoa people still live in open *fale* on the side of the road, and they fish or work in the plantations for their food. Women still get together to weave mats or discuss village matters. The un-titled men still do the rough labor, while the *matai* convene to make important village decisions. Paid wages in Independent Samoa reflect this lifestyle: since most food comes from the land and is readily available, hourly wages are minimal—so much so that they would seem inadequate to anyone living a different lifestyle. Money in Independent Samoa is used mostly to pay for conveniences like electricity, telephone service, and other modern commodities. Life in Independent Samoa is still very much lived the way it was generations ago.

Although part of this lifestyle (such as fishing or working in the plantations for food) may still hold true in American Samoa, much of it is driven by the need for money. With a local government dependent on the U.S. government, and the ability of American Samoans to travel freely to and from the U.S., there is a growing tendency to be more and more like America. This change has become most notable in the way people in American Samoa have been building their houses. Although some may still maintain a traditional open *fale* nearby, almost every home in American Samoa has Western features. With walls and windows that don't necessarily provide optimal ventilation, these Western

houses have been built not to accommodate to the Samoan culture and lifestyle but to adapt to a new Western lifestyle—one that values privacy, private ownership, and exclusivity, In Independent Samoa, houses are naturally ventilated; homes in American Samoa need air conditioning and fans. In Independent Samoa almost all houses resemble the traditional open *fale*. Many combine elements of the *fale* and of Western-style homes, using louvered windows to allow breezes to flow through while still allowing for some privacy. But even these are built to function as *fale*. Perhaps some of these changes have occurred because of the restrictions associated with being a territory of the U.S. All structures built in the U.S., including those built in territories like American Samoa, must follow certain building code specifications. The only exception to building codes in American Samoa relates to the building of a traditional open-walled *fale*. Yet even these have changed to embrace a new form of construction and new materials. The differences between American Samoa and Independent Samoa are evident in lifestyle and housing, but the core culture remains the same: respect and love for God and family. *Fa'asamoa* will never change; it will only adapt.

As *fa'asamoa* spread throughout the islands and around the world, it adapted to fit the needs of its practitioners, its settings, and the changing times. Yet it is the one thing that that will always unite Samoans, no matter how far apart they are, It defines and strengthens Samoan culture, and will help Samoans face the future without losing the traditions that make them Samoan.

Chapter 3

Case Studies

"To make art in a Samoan context or in a wider Pacific context is always a relational act that activates some aspect of the *va* relationships. It is an act of respect (between us/this place/who-in-you that is more-than-you/and a future to come); it is property of what is proper; the possession to be cherished to protect and to actively attend to" (Refiti 2008: 99).

Case Study #1
Hybrid *Fale* in the Samoan Islands

Intro

The concept of joining or combining a *fale Samoa* and a *fale palagi* is a recent development in Samoan architecture. It is a way for people in the islands to live in both types of *fale* without giving up the benefits of either one. *Fale Samoa* are open and airy; on a hot day it is where you would most likely find people escaping from the heat. Built to house a family and to display their status, *fale palagi* are places for visitors to sleep and places to store the family's possessions. Although some *fale palagi* are air conditioned, this is quite expensive—often it is cooler and more comfortable to sit outside in a *fale Samoa*.

History

It is difficult to pinpoint a time when these hybrid *fale* came about. The hurricanes during the 1990s most likely played a large part in the redevelopment and redesigning of *fale* in Samoa and the proliferation of hybrid fale. *Fale* began taking rectangular form when outside governments began subsidizing the rebuilding of houses damaged or

destroyed during hurricanes. The new houses were much easier and quicker to build, and since natural materials had been destroyed by the hurricanes, imported materials were used.

However, this is not the earliest form of hybridization to be identified in the Polynesian islands. The concept of hybridization began during the second half of the nineteenth century with cross-cultural churches (see figs. 1-3). Early churches in the Pacific were a mixture of long *fale* forms with coral, lime, and masonry walls. These churches "were sited mostly in prominent spots in villages, raised up high on stone and concrete platforms which dwarfed the surrounding chiefs' meeting houses."[75] Built by *tufuga fa'i fale*, the traditional Samoan builders, they combined Samoan *fale* construction methods with European designs and techniques. "The prominent features of these church buildings [were] the entrance archway and connecting bell towers which gave the building an authority in the context of the village's open common ground or *malae*. A roof in gable form or round arch would span the space behind the entrance archway, forming the body of the church."[76]

Samoan artist and architect Albert Refiti claims that these churches may have developed because Polynesians wanted an architectural testament to the "ideal version of the height of European spirituality." It was an architecture that was "imagined to be the utopia of a heavenly paradise in the eyes of a Euro-centric God." He continues: "These buildings were and still are, romantic projections by Pacific people of what a European

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[75] Refiti, Albert,"Polynesian Arcchitecture and Its Cross-Cultural Boundaries in New Zealand," Southern Crossings: Whaka whitiwhiti au Tonga, ed. Elizabeth Aitken-Rose, Diane Brand and Errol Haarhoff (Auckland: The University of Auckland, 2002) 537-550. P.545

[76] Refiti, Albert,"Polynesian Arcchitecture and Its Cross-Cultural Boundaries in New Zealand," Southern Crossings: Whaka whitiwhiti au Tonga, ed. Elizabeth Aitken-Rose, Diane Brand and Errol Haarhoff (Auckland: The University of Auckland, 2002) 537-550. P.545

paradise might be—fantasy creations caught in the absurd space of expectation. These (mis)representations are at the heart of cross-cultural exchanges and imaginings in this part of the world."[77] Although the truth of this claim is disputable, it is certainly possible that these early Samoan-European hybrids in part led to the hybridization of Western *palagi fale* and traditional Samoan *fale*. Simply put, Europeans built European houses, and *afakasi,* or half-castes, followed. Hybrid houses soon became a status symbol in Samoa. Like the adoption of European clothes and suits on Sundays, they signified wealth and success no matter how uncomfortable they were to live in.

Hybrid *Fale*

There are two forms of hybrid *fale*. The first is the rectangular *fale* that is built using modern materials but maintains tradition in its lack of walls. The second form consists of *fale Samoa* and *fale palagi* constructed side by side, connected by their foundation, by their roof structure, or both. This form allows the family to have all the comforts of living in a Western home while still having access to their Samoan *fale* (see figs. 4-9).

The first form came about as a response to newer building materials. Modern materials made it much easier to construct rectangular roofs than include the traditional rounded ends. The second form seems to have come from a desire to combine two styles of dwellings. There are several variations of this form. There is the rectangular *palagi* house with a rectangular Samoan *fale* form; the rectangular form with a round or oval

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[77] Refiti, Albert,"Imaginary Tradition: Pacific Architecture in The New Zealand Context," Exquisite Apart: 100 years of Architecture in New Zealand, ed. Charles Walker (Balasoglou Books, NZ on behalf of NZIA, 2005) 173-182. P.179

Samoan *fale;* and a few versions that incorporate the post system into the *fale palagi,* which gives the appearance of a veranda or lanai. Some distinctly share foundation and roof structures, while others mainly share the roof. Most of the Samoan *fale* that are incorporated in this manner have western-style ceilings (rather than the open vaulted forms of their predecessors), which include electric lights. Some incorporate elements of the traditional *fale,* such as overhead beams overhead lashed in sennit. These features, however, are mainly ornamental.

It is more common to see *fale Samoa* and *fale palagi* as distinct structures on the same property. The western *fale* is used to house guests and Western visitors, to store mats used during ceremonies, and to symbolize family status and the wealth of relatives living outside the islands. The *fale* Samoa is used as it has been for hundreds of years—as a cool shaded place to sit or sleep on hot day, where children playing on the *malae* can be observed without obstruction; and as a place to hold important *fono*, family gatherings, funerals, or Sunday *to'onai* [lunches]. This combined *fale* form allows families to enjoy the comforts and luxuries of both types of *fale*.

Analysis

The combination of *fale Samoa* and *fale palagi* has evolved largely because of the interaction between Samoan and Western cultures. Architecturally, Samoa has embraced elements of the West so as to not lose what they most value about their own architecture. Academic Clinton Bird states that

> While the adoption by the Samoan culture of the European house type may seem regrettable to a non-Samoan visitor, it should not be judged as culturally inappropriate. After all, the increasing numbers of European houses now being built all over Samoa,

> whenever they can be afforded suggests that they are aspired to and bring their inhabitants enhanced social status. This European house combines the various functions of the traditionally separate *fale* into one form.[78]

Samoan families have not lost their traditional *fale;* they have merely adapted them to fit their needs.

With the arrival of Westerners, Samoan housing changed, and *palagi* houses became a part of the landscape. They first housed foreigners newly arrived in the islands; then they housed Samoan chiefs, who established them as a symbol of status; finally, they became popular with the rest of the Samoan population, who also felt the need to establish their status within their villages. It is perhaps the romantic notion of living the Western lifestyle that encourages families to build *palagi fale*. But just as wearing heavy European clothing on a Sunday is ill-suited to Samoan life, *fale palagi* fail to provide the same comforts of a traditional Samoan *fale*. If an integration is to take place, it should be seamless, so that the two forms become one and the same: a Samoan hybrid *fale* that has all the comforts of a traditional *fale* with all the benefits of a *palagi* home.

Conclusion

There is a beauty about the Samoan *fale* that can only be realized by the traditional materials and construction methods. It is a form that has survived and evolved through the ages. If the purpose of combining traditional and Western forms is to give families the benefits of both, then why not integrate them into one solitary form instead of joining two separate structures at the foundation and the roof? A true hybrid *fale*

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[78] Bird, Clinton,"The European House: Crossing the Samoan 'Aiga Malae," Southern Crossings: Whaka whitiwhiti au Tonga, ed. Elizabeth Aitken-Rose, Diane Brand and Errol Haarhoff (Auckland: The University of Auckland, 2002) 113-129. P.126

would boast all the luxuries of the traditional *fale:* the openness of the vaulted roof, the un-obstructed views of the *malae* and ocean, the natural ventilation, and the privacy of enclosed bedrooms. Such a well-blended form would grant its inhabitants a new level of status and usher the islands into the future.

Figure 1: Catholic Church in American Samoa

Figure 2: Tongan Church in Otara, Auckland, Aotearoa/New Zealand

Figure 3: Tongan Church in Mangere, Auckland, Aotearoa/New Zealand

Figure 4: Rectangular fale in American Samoa

Figure 5: Rectangular fale in American Samoa

Figure 6: Hybrid fale form 1 in American Samoa

Figure 7: Hybrid fale form 2 in American Samoa

Figure 8: Hybrid fale form 3 in American Samoa

Figure 9: Old style fale in American Samoa

Case Study #2

Fale Pasifika: An Integration of Cultures

Intro

The term *Pasifika,* coined in New Zealand, speaks to the new urban generations of Polynesians and their relationships with their culture in this modern age. The *Fale Pasifika* is where they can go to help grow those relationships. It is more than just a *fale*; it is a series of buildings and artwork that come together to represent a "sea of islands." Seated on the campus of the University of Auckland, the *Fale Pasifika* makes up part of the university's Pacific Studies department (see fig. 10). It is used not only as a classroom but also as a venue for lectures, performances, banquets, and ceremonies. It is a place where the university community, the greater Auckland community, and most importantly the Pacific Islander community, can gather to discuss and participate in cultural events.

The vision for the *Fale Pasifika* originated after Dr. Melani Anae went to Samoa and saw the 500-person *fale* at the National University of Samoa campus. As the director of the University of Auckland's Centre for Pacific Studies, she had created a space in the anthropology department for Pacific Islander students. But she soon realized a bigger space was needed. Teaming up with writer and professor Albert Wendt and Samoan architect and artist Albert Refiti, she partnered with New Zealand's JASMAX architects to create a Pacific Studies complex that would accommodate instruction, research, and student services. Most importantly, it would serve as a gathering place for the University of Auckland's Pacific Islander students and community. "JASMAZ's principal architect,

Ivan Mercep, said the main challenge would be to design a traditional *fale* that could withstand Auckland's climate and conditions."[79]

History

New Zealand (Aotearoa), Hawai'i, and Easter Island (Rapa Nui) anchor the Polynesian Triangle, which includes the Marquesas Islands, Samoa, Tahiti, Tonga, and other Polynesian nations. These islands are tied together not only by the invisible triangle that surrounds them, but also by their similarities in language, culture, arts, and religion. Most Pacific Islanders looking to improve or change their living status consider New Zealand, Australia, and the United States, and usually gravitate toward the closest of the three. New Zealand, having had previous political hold over several of these island nations, is home to a large number of Pacific Island immigrants.

Immigration to New Zealand by Pacific Islanders began in the early 1900s, with the exception of Maori Pacific Islanders, who had arrived thousands of years prior and had already established themselves as the people of New Zealand/Aotearoa. In the twentieth century, waves of Pacific Islanders arrived, looking for better work and a better way of life. In 1922 more than 13,000 Pacific Islanders established permanent residency in New Zealand. From 1922 through the late 1980s, Pacific Islander migration fluctuated between 27,000 and -40,000 in and out of New Zealand:

> In March of 1994, there were approximately 175,000 people of Pacific Island descent living in New Zealand, the equivalent of just over 5 percent of the population. The 1991 Census indicated that persons of specified Samoan ethnicity were by far the largest group

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[79] Spasifik, "Fale Pasifika," Spasifik 4 (2004): 64-66.

> (85,743), followed by Cook Island Maori (37,857), Tongan (23,175), Niuean (14,424), Fijian (5,097) and Tokelauan (4,146). The Pacific Island population is the largest immigrant minority population in New Zealand, the fastest growing, and is characterized by a very youthful age structure, especially those born in New Zealand which comprise half the group.[80]

These statistics correspond to the increase in Pacific Island students at the University of Auckland (1,783 students from 2000 to 3,124 students through 2007[81]). With an increase of over 1,000 Pacific Island students within a four-year time frame, there is no question as to why Dr. Anae needed a new home base for her Pacific Island students at the university.

Project

Construction of the *Fale Pasifika* began in June of 2003 with hopes that it would become a place where students could "relax, share and affirm their identity," and a place that would "encourage more Pacific secondary students to move on to tertiary study." According to Anae, "young Pacific people have traditionally looked at the university as an alien place to which they could never aspire."[82] Now they would be able to look toward young Pacific Islanders who were already achieving beyond their aspirations. Ivan Mercep worked with a team of Polynesian artists to conceptualize the project. The principal focus was to represent the seven major island nations of the Pacific. The team

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[80] Appleyard, R.T. and Charles W. Stahl, South Pacific Migration: New Zealand Experience and Implications for Australia (Comonwealth of Australia, 1995). P.16,17

[81] University of Auckland, The University of Auckland: Key statistics, 3 November 2009, Accessed 3 November 2009 <http://www.auckland.ac.nz/uoa/key-statistics>.

[82] Sarney, Estelle, "Fale Complex Will Meet Modern Need," Ingenio Autumn (2003): 20.

chose the Samoan *fale* form, similar to the Tongan *fale,* as the main structure to which they could all relate.

The *fale* has been a longstanding symbol of the Pacific. It was one of the first structures to grace the islands. It sheltered islanders from rain and sun, yet allowed breezes to pass through on hot days. According to myth, the *fale* has existed since the beginning of creation. Although the form is not the same in all island nations, the materials used to construct *fale* or *fale*-type structures are similar throughout Polynesia, and it is still widely recognized as a symbol of the islands.

According to Mercep, the Pacific Studies complex is designed to resemble a typical Samoan village. The main *Fale Pasifika* is located near the center, surrounded by academic buildings and linked to them by a concrete *malae*. Art, sculptures, and symbols represent the many islands of the Pacific. The artwork and the *malae* that unite the *Fale Pasifika* with the academic buildings were designed by Tania Short, a Cook Island woman. She laid out tiles to illustrate the settlement of the Pacific, and showed that Polynesian travel routes were intentional, not accidental. She also depicted the "sea of islands" (a term, in opposition to "islands in the sea," coined by Tongan writer Epeli Hau'ofa) from the perspective of a satellite.

Sitting directly above the *malae* at the entrance of the complex is a steel gateway designed by Tongan architect Tomui Kaloni. Its shape echoes part of the ridge arch and the interior walls of an actual *fale*. It also creates a sense of entry. Accompanying the gateway arch is a series of seven stainless steel arches representing each of the seven major island nations of the Pacific. Each arch depicts a frigate bird (a kind of sea bird) designed by Cook Islander Jim Viviaere to "provoke thoughts of the

vast dimensions of the Pacific sea and sky, and an ocean that nurtures and connects islands rather than separating them" (see fig. 11).[83]

The Samoan artist Fatu Feu'u carved a 5-meter (6-foot) high warrior in the courtyard between the Pacific Studies building and the *fale*. The big red totem warrior is said to be the man people talk to before speaking to the chief. In front of him is a rock in which *kava* is ground in preparation for ceremonies, and beside him are two rock fire pits, said to have been used in Samoa in pre-Christian times. On the opposite side of the totem and across the *malae* is a small representation of a Cook Island *malae* where 13 stones form a small circle. This is echoed in the 13 similar stones from Samoa embedded within the *Fale Pasifika's* floor (see figs. 12, 13)

A series of 10 paintings by Niuen artist John Pule are etched into the windows of the Pacific Studies building. The paintings honor the people of the Pacific and the traditions that define them. Finally, contemporary Tongan *lalava* [lashings] artist Felipe Tohi designed and created ornamental sennit *fale* lashings. Although at one time these lashings bound *fale* posts together, in this case they had to be strictly ornamental because the New Zealand building code would not have allowed them to be used as part of the structure (see figs. 14, 15).

The *Fale*

The *Fale Pasifika* is New Zealand's biggest *fale* and the second largest in the southern hemisphere. It is 11 meters (36 feet) high, 26 meters (85 feet) long, and 15 meters (49 feet) wide, and can seat up to 300 people. Compliance with New Zealand

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[83] McKay, Bill, "Poly-technic," Architecture New Zealand 2 Mar/Apr (2005): 30-36.

building codes made it challenging to preserve the authenticity of the Samoan *fale*. The first step in designing the *fale* was to ensure it would serve the needs for which it was built. So that it could be used as a location for banquets and events for Pacific studies, it required seating and tables for 300 people. "Once this layout was established the rest of the *fale* could take form," Mercep, the lead architect for the project, said.

The form of the *fale* is that of a Samoan *fale afolau,* with a few Tongan design details added. Because of New Zealand's climate, planners had to reinterpret traditional materials and forms. Although New Zealand building codes were the principal determinants of the construction methods, other factors were also considered. For example, the *fale* was built over an underground parking structure, so its posts could not physically go into the ground as they would in traditional *fale* construction. Instead they were set into shoes or sleeves that were set into the concrete floor slab. This links the *Fale Pasifika* with the temporariness of many Samoan and Tongan structures that can be disassembled and moved to new locations if the need arises (although it is usually the roof that moves and not the posts). Peseta Lama Tone, a recent master's graduate from the University of Auckland School of Architecture, reflects that "the temporariness of the structure also reinforces the notion that the building is a migrant to the site since it lightly touches the indigenous landscape without becoming a part of it conceptually."[84]

Mercep and his team did their best to conceal as many brackets, screws, bolts, and non-traditional materials as possible. It was important to Mercep that the *fale* be a place of comfort, and that it have a feeling of openness. Although most *fale* in the islands are wall-less, New Zealand's colder climate made it necessary for Mercep to enclose the *fale*

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[84] Tone, Peseta Lama, "Designing with Pacific Concepts," MA Thesis, University of Auckland, 2008. P.76

using bi-folding glass doors and louvered window walls. He also added a layer of insulation within the skins of the roof. It is not visible to the naked eye but, it insulates the *fale* during Auckland's colder months. He also mounted electric heaters to the roof in preparation for extreme weather conditions. Motorized louvers installed along the extended roof ridge allow for natural ventilation in winter, and bi-fold doors and louvered windows facilitate the circulation of people and make passive ventilation possible during the summer months. Tone points out, however, that even though "Mercep was able to create a thermally responsive building, … there has been some degree of cultural compromise in order to achieve this."[85]

The *Fale Pasifika,* with its long form and rounded ends, is similar in form to a Tongan *fale* or a Samoan *fale afolau*. It also has the same spatiality and functions as its forbearers. The political and social space encompassed by the building informs the ways in which students, staff, and other communities use the space. It is the *va* that allows these interactions to take place within this space. Albert Wendt explains *va* as the space between, a space that brings about unity and gives meaning to all things.[86] In Polynesian culture and architecture, it is the *malae* that spatially represents the *va* of its surrounding buildings and people.[87] This concept became an essential part of the *Fale Pasifika*. Tone states that "the perimeter glazing of the *Fale Pasifika* enhances the transparency and openness of this communal space to the *malae*, which encourages the art of location

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[85] Tone, Peseta Lama, "Designing with Pacific Concepts," MA Thesis, University of Auckland, 2008. P.77

[86] Wendt Albert, "NZECP - Albert Wendt - Tatauing the Post-Colonial Body," 10 November 2009, www.nzepc.auckland.ac.nz, 10 November 2009 <http://www.nzepc.auckland.ac.nz/authors/wendt/tatauing.asp>. Originally published in *Span* 42-43 (April-October 1996): 15-29

[87] Refiti, Albert, "Making Spaces: Polynesian architecture in Aotearoa New Zealand," Pacific Art Niu Sila: the Pacific dimension of contemporary New Zealand arts, ed. Sean Mallon and Pandora Fulimalo Pereira (Wellington: Te Papa Press, 2002). P.209

when *va* relationships are activated within this space" (see fig. 16).[88] Simply stated, architectural spaces cannot exist without *va*, which relates buildings to each other, people to buildings, and people to people.

The *Fale Pasifika* uses local modern materials and makes modern connections. Because New Zealand building codes precluded the use of traditional Polynesian building techniques, different measures had to be taken to make structural connections, thus altering the aesthetics of some of the elements of a traditional *fale*. Some have criticized Mercep for allowing the building code to dictate how the *fale* was constructed when he could have cited the fact that the soundness of traditional techniques has been proven by hundreds of years of use. Jeremy Treadwell, architecture historian and senior lecturer at Unitec Institute of Technology in New Zealand, argues that changing the materials and construction of the *fale* recontextualizes it. It becomes less authentic and more representative of the dominant culture. He states,

> Displaced from traditional context, the design of a *fale* becomes, in part, the design of representations. A chain of negotiations arises between elements signifying tradition and requirements arising from the new context. Without binding traditions, things can get complicated, for everything is now at stake: form, structure, function, ornament, and of course spatial context.[89]

This can most clearly be seen in the *lalava* [lashings] that adorn the *fale* posts and hide and disguise the steel bolts that connect the main structural posts (see fig. 17). Traditionally, *lalava* is used to hold the posts together. It is a structural and decorative binding that holds the structure together and identifies it with the culture. *Lalava* vary

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[88] Tone, Peseta Lama, "Designing with Pacific Concepts," MA Thesis, University of Auckland, 2008. P.80

[89] Treadwell, Jeremy, "Chains of Negotiations: Navigating between Modernity and Tradition," Interstices: Animal/Impulse: a Journal of Architecture and Related Arts (2005). P.111

among Pacific island groups and incorporate different motifs and patterns. Tone argues that although the *Fale Pasifika lalava* are ornamental, they can transcend their original use: "It can be argued that postmodernism allows the non-structural to be as important as the structural, unlike modernism where the structural is important and the decorative is expendable. *Lalava's* presence in the *Fale Pasifika* is reminiscent of their customary roles, although their structural functionality is no longer required."[90] *Fale Pasifika's* materiality is an intertwining of the traditional and the modern. Both assist each other to ensure the stability of the structure and vibrancy of the cultures it represents.

Analysis

The architects of the *Fale Pasifika* did a fine job of integrating new materials and traditional cultural elements. However, incorporating traditional building techniques would have better married the modern and traditional, representing them as a union rather than a convergence of time periods. The *Fale Pasifika* is in itself a representation of in-betweeness. It does not embrace the modern in a way that will allow it to move toward a new style of *fale;* yet, in its failure to use building techniques of the past, it does not embrace the traditional either. This in-betweeness stems from the fact that the there is an overlapping, rather than a merging, of cultures. Traditional materials and techniques sit over the modern materials as adornment rather than blending together naturally and cohesively.

Jeremy Treadwell, in his paper "Chain of Negotiations: Navigating between Modernity and Tradition," argues that the Western interest in re-representing *fale* took

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[90] Tone, Peseta Lama, "Designing with Pacific Concepts," MA Thesis, University of Auckland, 2008. P.83

fale out of their "spatial and temporal contexts" and that "in the wake of these disjunctive interventions, *fale* building [was] no longer inextricably bound by traditional context. It [became] a self-conscious act of the present, in which values of the past [were] relativised and represented."[91] Samoan tradition invites innovation, innovation that, during the last hundred years, has led to corrugated steel roofs, concrete floors, nails, and the decline of *lalava*. These innovations that have in part shaped the *Fale Pasifika*.

According to Treadwell, Ivan Mercep's decision to allow the New Zealand building code to dictate the construction of the *fale,* and his choice to connect the framework of the *fale* with bolts and cover these with the *lalava* lashings "separated architecture from construction…. What could be a more explicit statement of function than the lashed joint? The union of elements can be traced with every turn of the *afa* (sennit cord)."[92] The *Fale Pasifika* lacks this union of elements and is thus only partially successful.

Conclusion

The *Fale Pasifika* is a good example of Pacific culture. Although its materials and construction methods could have been better merged, it is an excellent place for Pacific students, teachers, and the community to relax and to engage and support one another. It is a place that has "undergone modern transformations to suit the needs of a new generation of Pacific people living in the diasporic context of New Zealand."[93] It has

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[91] Treadwell, Jeremy, "Chains of Negotiations: Navigating between Modernity and Tradition," Interstices: Animal/Impulse: a Journal of Architecture and Related Arts (2005). P.111

[92] Treadwell, Jeremy, "Chains of Negotiations: Navigating between Modernity and Tradition," Interstices: Animal/Impulse: a Journal of Architecture and Related Arts (2005). P.112

[93] Tone, Peseta Lama, "Designing with Pacific Concepts," MA Thesis, University of Auckland, 2008. P.85

encouraged Pacific students to pursue higher education and to speak out. And since it was primarily built to accommodate the increasing numbers of Pacific Island students at the University of Auckland, the building has achieved its purpose.

Ivan Mercep, along with his team of architects, consultants, artists, and community members, created a building and complex that gave the students exactly what they needed: a place to belong on a large campus. Although its construction was hampered by the New Zealand building code, the *Fale Pasifika* united cultural elements and modern building techniques, and integrated modern devices that made the building adaptable to a climate not its own.

The *Fale Pasifika's* greatest achievement is its preservation of *va,* especially in terms of the integration of the *malae* and the main structure. "'*Ia teu le va*.' Cherish/nurse/care for the *va*, relationships"[94] is a Samoan expression that embodies the *Fale Pasifika's* purpose: to be a place that nourishes the relationships among Pacific students and encourages them to grow within their culture, to be secure in their identity, and to support each other within their community, all while opening their eyes to the world beyond the Pacific.

As more and more Pacific students seek higher degrees, it will be increasingly important to make sure they have places where they can relate to each other and to their cultures. The *Fale Pasifika* has definitely made a physical impact in the context of the university, and a mental and spiritual impact in the lives of those who use it. More importantly, it bears the cultural imprint of all the islands of the Pacific, making it

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[94] Wendt Albert, "NZECP - Albert Wendt - Tatauing the Post-Colonial Body," 10 November 2009, www.nzepc.auckland.ac.nz, 10 November 2009 <http://www.nzepc.auckland.ac.nz/authors/wendt/tatauing.asp>. Originally published in *Span* 42-43 (April-October 1996): 15-29

emblematic of a new kind of Pacific architecture that recognizes traditional strengths while integrating new traditions.

Figure 10: Fale Pasifika at University of Auckland, Aotearoa/New Zealand

Figure 11: Malae, Arch gateway, Frigate birds art installation at Fale Pasifika

Figure 12: Totem Warrior

Figure 13: Thirteen stone installation

Figure 14: Etched Polynesian Paintings

Figure 15: Tongan Lalava lashings

Figure 16: Fale Pasifika building, close-up

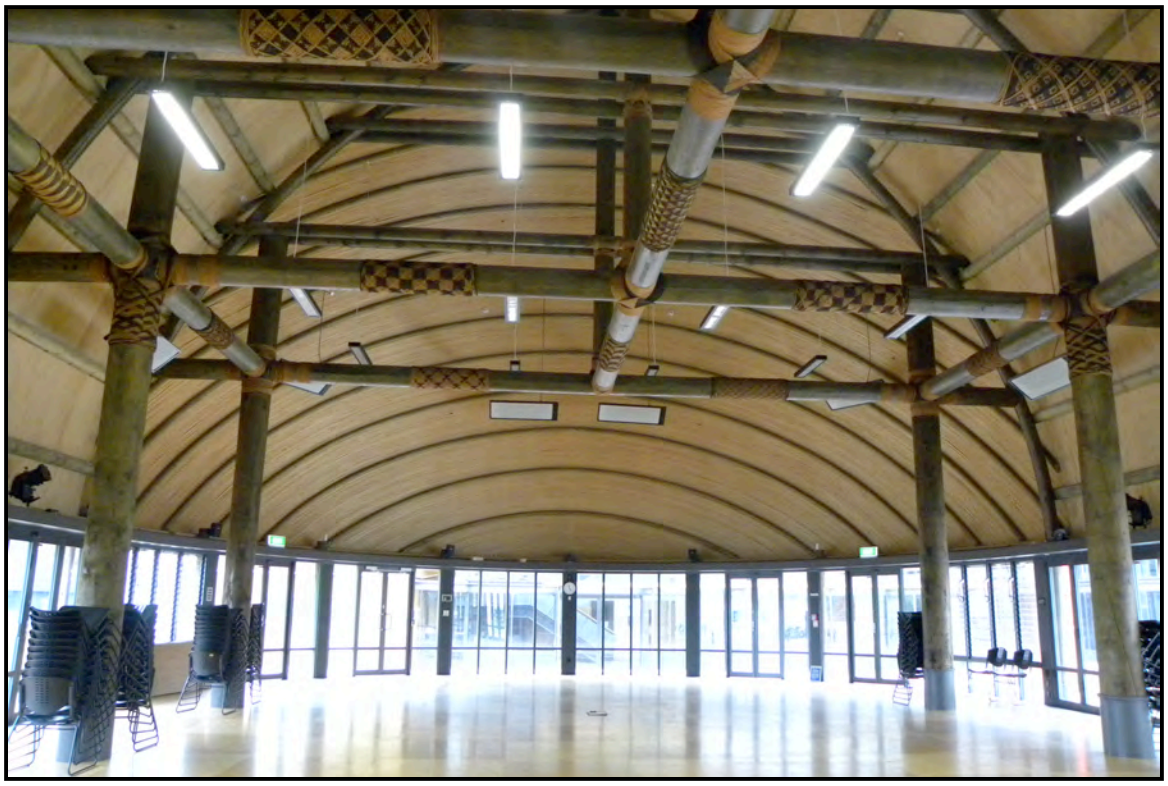

Figure 17: Fale Pasifika interior structure

Case Study #3

Te Ngakau Mahaki: A *Whare* Ahead of its Time

Intro

The *Te Noho Kotahitanga Unitec Marae Wharenui* is an amazing example of the balance of past, present, and future Maori architecture (see figs 18-20). Designed to speak to the different generations and ethnicities that use it, it was built in the most traditional manner possible. Traditional Maori decorative and construction techniques merged with new technologies; old materials were combined in new ways; and old stories blended with new ones to create a work of art that takes Maori architecture into the future without losing sight of tradition.

History

Whare means "house" and *Nui* means "big" but essentially, a *wharenui* is a Maori meeting house, a culturally significant structure:

> The key to the Maori universe is *Te Whare Runanga*, the meeting house, on its *marae*. It is the focal point for the spiritual, ancestral, chiefly and tribal values of the *marae*. It is the place called the *Turangawaewae*, a place on which to stand, where grievances are laid out and solutions are found. It is a place where the dead are farewelled and the living praised.[95]

Evidence suggests that meeting houses began to appear in New Zealand during the period of colonization in the late nineteenth century. Many tribes began coming together for larger gatherings to discuss the impacts of sovereignty issues and land

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[95] Simmons, D.R., Te Whare Runanga: The Maori Meeting House (Reed Publishing (NZ) Ltd., 1997). P.8

confiscations and sales on their culture. Because the idea of having a place in which to hold discussions had first come from the *whare runanga,* or chief's house, and later from churches, these models were applied to the notion of a "meeting" house. Indeed, the *wharenui,* or communal meeting houses, largely took the form of the *whare runanga,* or chiefs' houses, but were larger and represented the wider *hapu*/*iwi*/tribe rather than being under the control of the chief. This is what historical evidence tells us. Maori ancestral stories tell us that Maori chiefs' houses originally came from the gods:

> According to the ancestral and genealogical narratives of the East Coast tribe, *Ngati Porou*, the art of building meeting houses was brought from the world of the gods, to the mortal world, by the ancestor *Ruatepupuke*. In one version, when *Ruatepupuke's* son offended their ancestor *Tangaroa*, the god of the sea, *Tangaroa* kidnapped him and turned him into a bird and then made him the *tekoteko* of his underwater house, called *Huiteananui*. *Ruatepupuke* decided to rescue his son, and on approaching the house he was surprised to hear some of the internal wall *whakairo rakau* talking to each other. While freeing his son, he decided to take some of the other house carvings, but was only able to remove the silent ones from the porch. Once on land, and back at *Uawa* (also known today as Tolaga Bay), *Ruatepupuke* placed the silent *whakairo rakau* in a house called *Rawheoro*, where they were used as models for mortals to learn how to build and adorn meeting houses.[96]

Other stories suggest that meeting houses "had important symbolic functions—as metaphorical bodies, *whakapapa* and models of the Maori cosmos—in addition to being places of communal assembly."[97] For this reason meeting houses are said to represent the body of an ancestor. The gable head is referred to as the *koruru* or *tekoteko*; the arms are

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[96] Brown, Deidre, Maori Architecture from fale to wharenui and beyond (Penguin Publishing (NZ) Ltd., 2009). P.51

[97] Brown, Deidre, Maori Architecture from fale to wharenui and beyond (Penguin Publishing (NZ) Ltd., 2009). P.51

also known as the *maihi*; the *raparapa* are fingers at the end of the arms; the *tahuhu,* or ridgepole, is the ancestor's backbone; the *heke,* or rafters, are the ribs; and the *poutokomanawa,* the inside supporting posts, are described as the heart. The meeting house is the Maori ancestral house, the physical and spiritual body of those who have gone before. This is the house where the *whakapapa* [genealogy] of a tribe begins and ends. It is the house that unifies all who enter, making each individual part of one *whanau*, one family.

The main builders or designers of meeting houses were the *tohunga whakairo* [carvers], who envisioned the *whare* and brought each ancestor and story to life within the *wharenui*. *Tohunga whakairo* Paki Harrison describes Maori carving:

> Carving is the supreme artistic achievement of all the Maori people. It embodies the range of emotions common to all races; love, hate, joy, fear, challenge, reverence. It [carving] is the writing of a people belonging to an oral tradition who find total expression in an art form where mythology, history and a way of life are held within closely observed and acceptable limits.[98]

Maori carving embodies the Maori lifestyle: it spans generations and keeps stories alive for future generations. Thus, it was essential for Paki Harrison to research the *whakapapa* of the ancestors that he was carving. This required him to consult elders and verify genealogies.

Maori carving is thought to have started more than a thousand years ago, about the same time that adze- and chisel-makers began their work. The discovery of greenstone and the eventual introduction of steel helped this art form develop. It began as a way to revere ancestors who had passed way, making it possible for them to remain a

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[98] Walker, Ranginui, Tohunga Whakairo: Paki Harrison The Story of a Master Carver (Penguin Publishing (NZ) Ltd., 2008). P.107

vital part of the living community. According to Phillips, "It was this ancestor reverence which produced Maori carving art where ancestral figures take pride of place."[99] This reverence is linked to a key aspect of Maori culture: *tapu*.

Tapu, the strongest force in Maori culture, is defined as that which is sacred, forbidden, or restricted. When something is *tapu,* it is not tampered with for fear that it will upset the gods. Many *tapu* govern the art of carving, dictating who can be present during carving, and what should be done with wood shavings. An especially important *tapu* requires that each carver work only on his own project. If a carver were to work on or finish another carver's work, great danger would befall the carver, his family, and/or his workers. Therefore, "each carving was *tapu* to its creator."[100]

During the nineteenth century, Maori based-carving began to respond to the influence of Christian and European cultures. Carvers made meeting houses more representational by designing their carvings to "[provide] direct reference to mythological, legendary and historical traditions that could be told to younger people who had not grown up in the older cultural context and therefore had not internalized the older connotations."[101] The carvings did not have to directly represent traditions; they had to express them conceptually. Instead of representing an ancestor literally, for example, a carving might focus on one of the individual's characteristics. Neich tells us that

> time itself in the Maori view, then, is considered as belonging to the action more than as being absolute. Thus the actions of the kinship group are not only significant as true

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[99] Phillipps, W. J., Maori Carving Illustrated (Heinemann Reed Publishing (NZ) Ltd., 1955). P.6

[100] Phillipps, W. J., Maori Carving Illustrated (Heinemann Reed Publishing (NZ) Ltd., 1955). P.8

[101] Neich, Roger, Carved Histories: Rotorua Ngati Tarawhai Woodcarving (Auckland University Press, 2001). P.110

> expressions of life in the ancestors, but also of life in the living; for the same life, the same *mana*, is active through the history of the kinship group.[102]

Maori ancestors are seen as living and are very much a part of the tribe. Accordingly, ancestors represented in meeting houses actively support their descendents. Carvers, then, did not depict time as a particular stage but as a continuum that renders the carvings timeless. It was only through the influence of European culture that some carvers began to depict specific occurrences in time.

Materials in Maori carving have special significance and symbolism. The trees used for carving represent Tane, the god of the forest, who separates mother-earth and father-sky by standing on his head and pushing them apart. Once the wood is carved and used for a house, it represents tribal chiefs. Just as Tane joined mother-earth and father-sky, the foundation of a Maori house touches the earth, and its rafters and ridge reach toward the sky, where the spirits live.[103]

Adze tools were said to have appeared during pre-European times. Carvers were trained to shape their own adze tools. When metal tools were introduced, carvers recognized their advantages and integrated them into their own tool sets, adding modifications to best suit their needs. Harrison, who experienced part of the transition, reflects: "New tools are being used to gain maximum efficiency, where time [of the carver] has become a prime factor in cost. New materials are being discovered and exploited as old materials become depleted."[104] This is unfortunately common across all Pacific architectures.

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[102] Neich, Roger, Carved Histories: Rotorua Ngati Tarawhai Woodcarving (Auckland University Press, 2001). P.136,137

[103] Neich, Roger, Carved Histories: Rotorua Ngati Tarawhai Woodcarving (Auckland University Press, 2001). P.146

[104] Walker, Ranginui, Tohunga Whakairo: Paki Harrison The Story of a Master Carver (Penguin Publishing (NZ) Ltd., 2008). P.108

Maori meeting houses were originally constructed so that their main elements worked together to support the weight of the entire building. Each element was first carved or painted to represent a *tipuna* [ancestor] or *korero* [story]; then it was placed within the structure to help bear the load of the rest of the building. One solid piece of wood was used to create a single element and a single ancestor. As steel tools, sawn timbers, and other Western building materials made their way into New Zealand, they were adapted to suit Maori construction, carving, and building methods. It is possible that the very first modern Maori meeting house, *Te Hau-ki-Turanga,* was built using these outside materials.

The School of Maori Arts and Crafts in Rotorua opened in 1926 in response to the decline of Maori art and architecture. The school began to train *tohunga whakairo* [master carvers] and other artisans associated with Maori architecture. It became a laboratory for teaching, and many of the meeting houses found on the north island of Aotearoa/New Zealand were built by its students and graduates. It this way, the school revived the art of carving meeting houses.

Although it primarily taught traditional carving customs, it slowly incorporated modern materials and forms into its buildings because many traditional Maori materials were no longer available, and many violated modern building regulations. Concrete and steel were incorporated into the meeting houses, which were required to comply with building codes and earthquake regulations. To preserve the traditional appearance of the meeting houses, these modern materials were often hidden under carved, woven, or painted elements. As time progressed, builders began incorporating seats into the walls and removing *poutokomanawa* [center posts] to accommodate modern dances.

The School of Maori Arts and Crafts, along with one of its founders, Sir Apirana Ngata, "assisted in the construction and renovation of around 21 *marae* meeting houses, two exhibition meeting houses, ten dining halls, two assembly halls and six chapels or churches." Students had the chance to plan and build these structures, while at the same time learning and perfecting their techniques. It is because of the school that

> many men and women learnt about Maori architecture within their own communities and experts were trained to be able to find their own private commissions, thus perpetuating Maori architectural arts. But of even greater significance, in terms of using architecture as a vehicle for demonstrating cultural identity, the school's projects were distinct, visually and politically, from *Pakeha* architecture. They set the aesthetic and functional benchmark for all subsequent Maori buildings.[105]

If not for the School of Maori Arts and Crafts, Maori architecture would be nowhere near what it is today. The school has taught and revived traditional architectural practices while acknowledging the impact of modern materials and forms. Students have taken these materials and incorporated them in a way that maximizes structural and aesthetic harmony.

Pakeha (New Zealanders of European decent) culture introduced new buildings, new materials, and new technologies. As a result, Maori culture began to change. And with Maori moving to the cities in the early 1940s, architecture became a point of connection, a place where both cultures could interact. Biculturalism became a dominant attribute of Aotearoa/New Zealand architecture, with Maori concepts and ideas merging with *Pakeha* building designs and technology. Biculturalism also came to embody the relationships between Maori and non-Maori communities. Beginning in the 1990s, public

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[105] Brown, Deidre, Maori Architecture from fale to wharenui and beyond (Penguin Publishing (NZ) Ltd., 2009). P.95

buildings incorporated prominent bicultural elements to represent Maori communities who demanded that their culture also be recognized. Successive governments developed bicultural policies that called for the creation of "culturally inclusive spaces for Maori user-groups." Architects were challenged to meet requirements of the government while at the same time responding to the Maori community.

Maori architecture is moving forward thanks to the cultural momentum of Maori communities, where new generations of Maori are learning the arts of their ancestors. Representing this exciting shift is the *whare* at Unitec—a vessel of past, present, and future Maori architecture.

Project

"*Te Noho Kotahitanga,"* translated as, "to reside in unity," is also referred to as "the partnership." It is a space that celebrates all cultures, and offers spiritual and physical comfort. *Te Ngakau Mahaki Wharenui* at *Te Noho Kotahitanga Marae* at Unitec University in Auckland, Aotearoa/New Zealand, is the first of its kind. Designed by Master Carver Lyonel Grant, this particular *whare* has many features that set it apart from its counterparts. In 1999 John Webster, a Scotsman, became the chief executive officer of Unitec. He immediately inquired as to why Unitec didn't have a *marae* and a *wharenui*. This began the ten-year process of designing, carving, and constructing the *marae* and *wharenui*.[106]

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[106] Rau Hoskins, Rau Hoskins Unitec Marae Interview, Leah Stucky (Auckland, 30 September 2009).

After a two-year review process, the committee chose Lyonel Grant to to be the project's master carver. Grant is a graduate of the New Zealand Maori Arts and Crafts Institute in Rotorua, Aotearoa, a school that reopened in 1967 to preserve the Maori arts.

> Lyonel is best known for his work as a customary Maori carver. ('Customary' is now preferred over 'traditional' because it evokes the weight and responsibility of the past as a model, without suggesting that things never change or that artists can't adapt to new situations.) 'Customary' indicates that Lyonel works within a body of knowledge and expectations of how things will be done. This affects the choices available to him, and the meaning and purpose of what he makes.[107]

Grant was ideal for the project because, as a customary carver and an acclaimed contemporary Maori artist, he was well positioned to think innovatively. Upon being chosen as master carver, Grant was also given overall design authority. Most master carvers are currently regarded as interior decorators, so giving Grant complete design authority helped restore the role's prestige and significance. The importance of the master carver's role had been eroding since the beginning of the twentieth century, when the adoption of Western building techniques relegated him to "fitting out" meeting houses designed and built by others. It was Grant who came up with the concept of using a *manaia* [a stylized bird profile commonly used in various carving styles] form. He suggested wrapping the new *marae* complex around to the northwest of the existing *Puukenga* Maori studies building side, an east-facing courtyard. The bathroom wing would represent the body; the *taonga* [treasure storage] would represent the head; and the house would be configured as the speaking component.[108]

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[107] Grant, Lyonel and Damian Skinner, Ihenga: Te Haerenga Hou The Evolution of Maori Carving in the 20th Century (Reed Publishing (NZ) Ltd., 2007). P.13

[108] Rau Hoskins, Rau Hoskins Unitec Marae Interview, Leah Stucky (Auckland, 30 September 2009).

Grant started the carving process three years before construction of the *wharenui* began. A traditional *wharenui* in pre-European times would have been constructed in this manner, with the structural elements being carved and set in place before construction began. Having been gifted logs (including 1000-year-old *Totara* logs) felled from the *Te Whaiti* forest, Grant began carving.

This method of constructing the *wharenui* had not been used for 100s of years. In order to comply with building regulations, most modern-day *wharenui* are constructed with a structural shell, to which the carved elements are mounted. Although they are not fully structural, *poupou,* or wall carvings, convey the ancestors' support for the owners of the *wharenui*. Grant wanted to develop a *wharenui* that integrated the carved elements on a structural level, like in times past. He worked with construction manager Andy Pivac, Nancekivell Cairn engineers, and designTRIBE architects to realize this goal. Grant and Pivac demonstrated how the carved elements would work structurally, while the engineers and the architects who supported Grant's idea did the necessary drawings and calculations to ensure the building would pass all inspections.

Once construction began, great care was taken to ensure that all materials were handled with a level of respect befitting Maori construction traditions. Pivac prohibited foul language on the construction site, and stipulated that leftover pieces of wood would not be discarded but placed into bins that would later be taken back to the carving studio, and eventually taken back to the forest from which the logs originated. This aspect of building tradition was part of Maori *kaitiakitanga* [guardianship] over the land, and it ensured that everything was returned to mother earth. Pieces of wood were not dropped or kicked aside, as it was important to respect the materials and tools being used on the

project. Maori culture dictates that women are not allowed to observe or participate in the carving and construction. Accordingly, women were not allowed on the *wharenui* premises (though they were allowed into the separate carving workshop during the six years it took to carve all of the elements).

The *whare* was constructed using all traditional methods, with some modern materials and tools, such as steel, bronze, copper, concrete, and LED lights (see figs. 21-23). Builders used modern materials to represent old forms, styles, and elements that were essential to the structure. The most important features of the *wharenui*—and the ones most emblematic of both tradition and innovation—were the *whakairo,* or carvings.

Each carving on a *poupou* [wall post] inside the *whare* tells a story, and together, the posts describe Maori culture and its evolution. Starting with the back wall, which includes figures of prominent groups of people from around the 1300s, and moving toward the front of the meeting house, each post focuses a certain time period. Grant states that "by the time you get to the middle of the meeting house the time slot is 1840 and as you move further forward the narratives will start talking about more contemporary issues"[109] The center post [*pou*], also called the heart *pou,* or *pou tokomanawa,* speaks about the Treaty of Waitangi. It is cast in bronze and has pieces of the treaty imprinted on it. Grant's use of contemporary elements allowed each *poupou* to more accurately reflect the time and subject matter. This was fitting for the meeting house since it was to be part of the university, a continuously evolving institution.

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[109] Lyonel Grant's Vision for a Marae for the 21st Century: An Extraordinary Project at Unitec, dir. Tony Wright, perf. John Gow and Lyonel Grant, 2007.

What sets the Unitec *marae* apart from all others are the attention to detail and the artistry evident in all aspects of the carving and construction process. By adding modern twists to traditional elements, Grant made connections to the landscape. and he used both very "traditional structural elements like the *pou tuarongo* and the *pou tahuhu* which are the rear and front posts that support the *tahuhu* or ridge beam. To the modern conception of the *tahuhu* or ridge beam as a *waka* form which is a fully carved *waka*."[110] Grant is a contemporary artist and a master carver, who looks to the whole environment for inspiration. He has taken the *wharenui* in Aotearoa/New Zealand into the future and established the standard on which future *wharenui* will be designed and constructed.

Conclusion

Te Noho Kotahitanga Unitec Marae Wharenui is notable not only for its level of detail, but also for its ingenuity: builders took techniques that were hundreds of years old and reformulated them for modern times. They adapted modern materials so that they helped tell a story rather than overpowering it. The *wharenui* at Unitec effectively blends past, present, and future Maori architecture.

For Maori culture to go from almost completely losing the tradition of carving to teaching students and turning them into master carvers like Lyonel Grant is something that rarely happens in colonized indigenous societies. Without the teachings of the School of Maori Arts and Crafts in Rotorua and the encouragement of open-minded and forward-thinking teachers, Lyonel Grant would not be the Master Carver he is today, and the Unitec *marae wharenui* might still be a vision awaiting its maker. Traditional Maori

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[110] Rau Hoskins, Rau Hoskins Unitec Marae Interview, Leah Stucky (Auckland, 30 September 2009).

architecture is a great example of what it means to integrate culture and architecture, and Grant has taken the next step in *wharenui* design, thus bringing the old and the new together to move Maori architecture into the future.

Figure 18: Te Noho Kotahitanga Unitec Marae at Unitec University, Auckland, NZ

Figure 19: Te Ngakau Mahaki Wharenui at Unitec University Marae

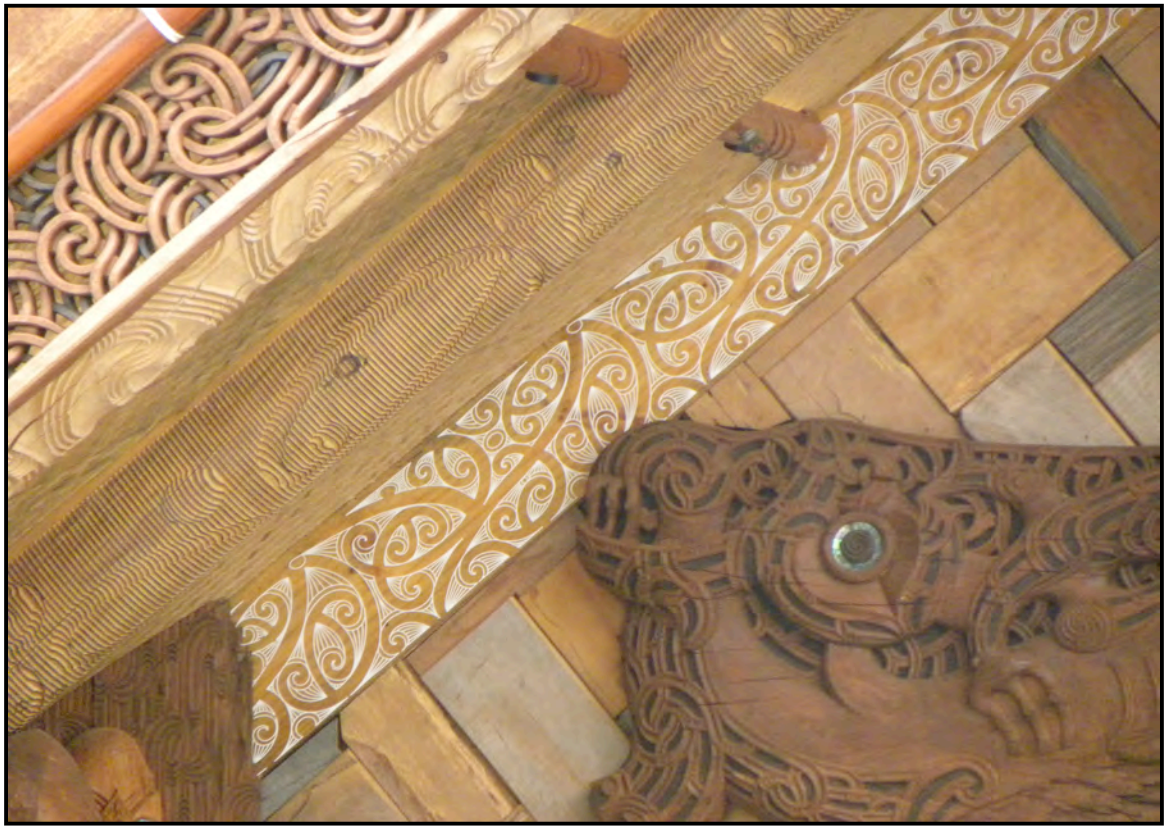

Figure 20: Te Ngakau Mahaki Wharenui, close-up (corner detail)

Figure 21: Te Ngakau Mahaki Wharenui, close-up (vent detail)

Figure 22: Te Ngakau Mahaki Wharenui, close-up (raparapa/fingers detail)

Chapter 4

Primary Design Assumptions

"The role of art and by extension architecture is to adorn, to embellish the *va* relationships between families, communities, people and environment." (Refiti 2008: 100)

The above research informed and guided the overall design of this thesis project.

Current Situation

Fale in American Samoa are changing in form and in purpose. Traditional *fale,* built using traditional materials and methods, unfortunately no longer exist in Tutuila, American Samoa. Builders no longer construct *fale* from the wood of *pou muli* and the breadfruit trees; they no longer use sennit for lashings and sugar cane leaves for thatching and *pola* blinds. After extensive travel on the island, not one traditionally constructed Samoan *fale* could be found. Several older structures that appeared to be traditional *fale* were constructed partially using modern materials and methods.

Fale still exist in American Samoa, just not in the traditional state of sixty years ago and earlier. *Fale* originally made of wood have been replaced by more permanent concrete structures consisting of harder surfaces that blend in less with the environment. Today's *fale* use concrete for floors and posts, and have corrugated tin roofs with nets over them to discourage birds from sitting on them. The wood used for rafters and beams are nailed together instead of lashed.

Most of today's *fale* are used for ceremonial purposes—specifically, family gatherings, funeral ceremonies, and important family and village meetings, as well as for ceremonies pertaining to visitors. They are not typically not used for daily living, except to shelter playing children or, at times, resting adults. Because of urban development and

environmental changes, more families have begun to live in Western-style housing. In American Samoa, the concrete semi-traditional *fale* are all that remain of traditional Samoan *fale*.

Housing Types

Housing in American Samoa has transitioned from the traditionally crafted open, wall-less *fale* to the Western *palagi*-style house. These newer *fale* are constructed of modern materials, but often retain some of the important features of Samoan architecture, such as open interior space and the absence or reduction of walls. These wall-less concrete *fale* are used more as meeting spaces and are usually found in front of or beside a *fale palagi,* where the family actually resides. Western-style houses in Samoa are simpler and may contain fewer interior walls, creating a larger open space that can be used in various ways. Their windows allude to the transparency of wall-less *fale,* but still provide privacy. The change in building shape and increase in privacy, however, have changed the ways in which Samoans in Samoa live and interact with one another. The traditional social and physical transparency has been replaced by a desire for occasional privacy and more enclosed space. One goal of this design project, then, is to ensure visual transparency of the residence while still preserving privacy in a house that will speak not only to the past and present, but also to the future.

Program Development

Vision

The vision of this project is to design a family compound that encompasses *fa'asamoa,* and, within the compound, a home that spatially and visually represents the Samoan culture and lifestyle. It will be a home that remains true to the ideals and customs of the Samoan lifestyle, and that reflects the relationship between culture and architecture. The following objectives guided the process:

- A house that first and foremost reflects Samoan culture
- A house that represents the past, present, and future of Samoan architecture
- A house that is sustainable, ecologically friendly, and self-sufficient

Design Guidelines

Aspects of the Samoan culture—specifically the *'aiga*, the *fale*, the village, the church, and the *matai* system—were core considerations in the development of the project, as these relationships physically, visually, hierarchically, and psychologically form and delineate spaces in Samoan society.

Site: On-site considerations and features that inform the design of this project include

- Family land boundaries, restrictions, and conditions
- Building size and appearance
- Appropriate buildable area and amount of land to be cleared for construction, as determined by site circumstances (the site is a part of the

American Samoa National Forest Preserve leased by the United States to the people of American Samoa)

- Parking area
- *Malae,* or open space similar to a village commons area
- Traditional *fale talimalo* for use during special ceremonies and gatherings
- Laundry area
- Outside kitchen space and *umu* for Samoan-style cooking
- Outside bathroom and shower spaces
- Memorial grotto for those family members who have passed away
- Space for cultivation of foods such as taro, breadfruit, and other Samoan crops
- Compost area

Building: Design objectives for the building include

- Strong visual transparency between the interior and the exterior
- Transitional spaces between public and semi-private spaces within the home
- Multiple rooms to accommodate the number of families using the house at any given time
- An open floor plan that allows for multiple uses including eating, sleeping, family meetings, and socializing
- An inside kitchen space
- Inside bathroom and shower spaces

Culture: Concepts important to the design of the project include

- Dualities in Samoan culture:
    - *'I tai* and *'I uta* (Seaward and Landward): orientations important to the placement of buildings and other land features on site
    - *'I luma* and '*I tua* (Front and Back): orientations important to the placement of rooms in a building (e.g., kitchen, bathrooms, bedrooms, etc.)
    - *Lelei* and *Leaga* (Good and Bad): qualities associated with the orientation of spaces in relation to cultural practices
- *Matai* system: hierarchical system used in organization of the *fale* (e.g., in post organization, room layouts)
- The church and *tautua* (service): the acknowledgment of others needs before one's own (e.g., the serving of guests and elders within the *fale*)
- Traditional materials and construction methods, which can be combined with new ones

Although all of these principles will guide the design and construction of the Samoan village and home, many modern materials and techniques will inform the project as well. For example, concrete posts and floors will allow for more durable and firmer foundations, and machined lumber will allow for easier and faster construction. Other modern features may include louvered windows, air conditioning, and solid walls. We must not forget that modernity is also important to an evolving culture.

Proposed Program*

SPACE	NUMBER	SIZE (SF)	SUBTOTAL
GRANDFATHER TALI'S HOUSE			
Bedrooms	2	157 + 192	349
Fale Space includes:	1	703	703
Meeting Space			
Gathering Space			
Living/Dining Space	1	1057	1057
Kitchen	1	149	149
Full Bathrooms	2	104 + 114	218
Computer/Game Room	1	164	164
Additional Lanai	1	577	577
GUEST HOUSE			
Bedrooms	2	189	375
All Inclusive Fale Space contains:	1	783	783
Living Space			
Dining Space			
Meeting Space			
Gathering Space			
Full Bathrooms	2	100	200
Kitchen	1	344	344
OTHER OUTDOOR SPACES			
Fale Tali Malo	1		
Malae	1		
Umu Fale	1		
Family Memorial Space/Grotto	1		
FUTURE SPACES			
Hotel/Restaurant	1		
Fale o'o	6		
Roadside Snackshop	1		
Bathrooms	3		
Parking Area	2		

Living, dining, meeting, and gathering areas may be molded into one multi-purpose general space that can be adapted or modified as needed. Larger open spaces will accommodate family dining, large family meetings, or the hosting of guests for large ceremonies. The main idea is to create as open a floor plan as possible—one that respects Samoan tradition while providing for modern needs, such as individual bedrooms for visiting guests and other family members.

These structures and spaces are designed to fit into a 50-year Master Plan Phase Layout. This layout will reduce cost, allow for the land to be built in phases, and accommodate future adjustments.

50-Year Master Plan Phase Layout

Phase 1: 5–10 years

+ Build addition to Grandfather's house

+ Add *umu* structure

+ Add Grotto/Memorial

+ Extend existing crop growing area and add garden space

+ Upgrade plumbing and electrical systems and incorporate sustainable solutions

Phase 2: 10–20 years

+ Build a traditional *fale talimalo*

+ Clear *malae* area

+ Add three family guest homes

+ Modify road and extension onto land

Phase 3: 20–50 years

+ Extend road to beach if hasn't been done yet

+ Add roadside snack shop

+ Build hotel/rentable rooms/restaurant

+ Incorporate several *fale o'o* onto site

Site Selection

The site was selected during a visit to my friend's family land in American Samoa. The land, which has been passed down from generation to generation, lies within the village boundaries of Vatia and the valley of Amalau, on the island of Tutuila, American Samoa. It also lies within the boundaries of the American Samoa National Forest Preserve.

Site analysis

Because the site is in a valley, it is naturally U-shaped, with the open end facing a small beach that looks out toward the ocean. The valley of Amalau, shared by the Lauti and Uta-Afasene-Tali families, is roughly divided down the middle by a stream that comes from the mountains above. The land to be developed belongs to the Uta-Afasene-Tali family. It measures approximately 8.9 acres and includes steep hillside terrain. The main slope of the land runs from the main road toward the ocean; its elevation begins approximately 100 ft. above sea level and moves gently down until it reaches the ocean.

The site currently contains one small four-walled structure and a small pigpen. The land is rocky but heavily vegetated. It is only accessible via a road near the existing structure; the rest of the site must be accessed on foot, with machete in hand. Toward the ocean, there is a clearing that is surrounded by tall trees, a mountain to the east, and the stream to the west. The clearing is overgrown with decomposing plants and trees. There is also a large sinkhole that may be associated with the stream running near it. The beach is made up mostly of coral fragments and large rocks, with some sand toward the west side, near the Lauti side of the valley. It is more accessible by foot and car on the Lauti side, which has already been developed and is currently being utilized. Vegetation removal and further examination would be necessary on the Uta-Afasene-Tali side of Amalau to determine ground stability, especially for structures that sit closer to the ocean. Within the site is a Federal Emergency Management Agency (FEMA) Vertical Evacuation (VE) Zone. This FEMA-designated VE Zone indicates the "Areas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action."[111] This zone will dictate the buildable boundary on the land in relation to the beach and ocean.

The stream that runs through the valley may provide usable water for vegetation and possibly for plumbing purposes. Building a small reservoir at the source of the stream (near the back of the mountain) would help distribute the water (the land currently has a PVC pipe that provides fresh stream water for the pigs).

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[111] Federal Emergency Management Agency, FEMA: Zone VE and V1-30, 20 September 2010, Accessed 20 September 2010 <http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/zone_ve.shtm>.

There are several types of trees on site, including the *poumuli* tree, which is used for posts on a traditional *fale*. Other trees include coconut trees, breadfruit trees, and banana trees, all of which are cultivated and used by the family. These trees should be retained, as they can provide food and possible income. The fragrant *moso'oi* tree, palm trees, and mangrove trees are a few of the other identifiable trees on site. The five to six large trees near the water's edge should be kept for aesthetic purposes and to provide shade. Indeed, once site development begins, as many trees as possible should be preserved.

Grandfather Tali's house sits at the entrance to the land, just off the main cross-island road that leads to Vatia. The house is 40 ft. by 40 ft., with an open floor plan and an added side room, which includes an unfinished bathroom and shower. The house is currently used for storage, but will be renovated per the design project to fit the family's needs. The house is currently connected to the main American Samoa Power Authority electrical grid, but this service has not yet been activated. In order to create a self-sustainable compound at Amalau, it will be important to do solar and rain studies to see if water catchment and solar panels would be a feasible option for the land. These can be constructed at a later time, once the preliminary structures have been built.

Although it is currently overgrown, the land is suitable for development. With resources such as trees and rocks that can be used for building and grooming the site, all that remains is to slowly clear the pieces of land necessary to implement the new design.

Samoan Spatial Layouts on Site

The layout of the site attempts to recreate traditional Samoan village layouts in which the open *malae,* the culturally appropriate *fale,* and the attention to *'i tai* and *'i uta*

orientations and relationships are observed. Seaward and landward orientations dictated how main areas were laid out. These were taken into account when structuring interior spaces used for sleeping, cooking, and bathrooms. Culturally informed spatial orientation brought dignity into the structure and was central to the design of the site as well as the main house. Although weather does not seem to be directly linked to traditional Samoan site and village layout, flooding and other extreme weather conditions were considered in order to ensure stability of the new design. Site access was based on traditional organization methods that can also accommodate heavier vehicle use during family reunions.

Chapter 5

Design Project

"So'o le fau ma le fau" To tie together two pieces of fau. Proverb: To pursue a goal with united strength." (Sutter: 1)

The purpose of this project is to incorporate historical and cultural research into the creation of a family compound while at the same time being receptive to the continual changes in the Samoan culture. The project begins with site organization—integrating the natural lay of the land with traditional Samoan village organization. The project also takes into account the details of individual structures on the site, how they relate to one another, how they relate to the site, and how their interiors should be organized according to the traditional Samoan lifestyle. At the same time, it considers how the culture has changed and continues to evolve.

Process and Program Concept

A New Village Concept

One of the goals of the project was to integrate as much of the culture as possible while providing opportunities for the family to grow its own food and generate income that can be used to maintain the land and the buildings. This differs from a traditional village in that the sources of revenue—the roadside snack shop, hotel, and restaurant—are Western-influenced and not necessarily culturally bound. This new type of village exemplifies the modernization of the Samoan islands and of *fa'asamoa*. It provides more than just a place to live and gather; it provides for the financial independence of the present generation and of generations to come.

The project also incorporates modern materials and construction methods, and uses sustainable features such as solar electricity and water catchment. Amalau is a place where future generations can honor those who have gone before them and connect with the ever-changing Samoan culture. Thus, the Uta-Afasene-Tali side of Amalau valley is designed to resemble a miniature village. It runs from north to south, mountain to ocean, as a typical Samoan village would. The houses on the land sit around a central *malae,* facing inward. Grandfather Tali's house, the central focus, sits at the top of the site, near the entrance and up against the mountain. Additional guest houses will be built as needed and, following the master plan, will help to create the important *malae* space, thus creating the feel of a small village.

The land is divided into two portions: an upper portion that remains strictly for family use and affairs, and a lower portion that can be used to generate income for the family. Here, visitors or tourists could be welcomed to stay for a weekend vacation or an afternoon getaway by the beach. Houses are situated in accordance with the *'i tai,* and *'i uta, 'i luma* and *'i tua* cultural directions. Thus, functional spaces such as bathrooms and kitchens face the mountainside—*'i tua,* or *'i uta;* and the areas of the houses that pertain to the public or to more formal aspects of Samoan culture face the *malae* and ocean—*'i tai* or *'i luma*.

Grandfather Tali's House

It was important to the family to retain Grandfather Tali's original house structure, so decisions about how to appropriately re-organize and re-orient the house were carefully considered. It was essential to create a design that was consistent with

Samoan culture and that could accommodate future usage by the family. The house will be extended on the northern and western sides to provide additional space for family gatherings and other functions. On the western end, the house will be extended to create an outside lanai attached to a semi-circular *fale*, creating a new entrance and providing a space for family gatherings and meetings.

The half-*fale* shape was incorporated into the design of the house—not simply attached to the existing Western-style house but embedded so that it appeared as if both past and present were merging. This is consistent with the needs of and changes in Samoan culture. The lanai within this *fale* shape will provide an area where *tautua* (service) and *fe'au* (chores) can take place behind the scenes (*'i tua*). This service space is vital during preparations for any family event or ceremony. The northern extension of the house will include an interior lanai/entertainment area that looks out toward the *malae*, and a computer/game room. Both the lanai and computer/game room reflect the modernization that has become a reality for families in Samoa. This room will offer a space for younger generations to spend time together.

The interior of Grandfather's original house will be partitioned to create space for two bedrooms, one of these being a master bedroom with bathroom access. Although bedrooms are not traditional in Samoan culture, they were introduced concurrently with Western notions of privacy. Therefore, although the purpose of this project is to ensure as much of the Samoan culture is embedded in the design as possible, it is important to also recognize aspects of Western culture that have made their mark on Samoan culture.

Because of this, Western features will be incorporated into Grandfather's house and the additional guest houses on the land. The original back portion of Grandfather's

house will be divided to accommodate a small inside kitchen, pantry, and bathroom. These will be placed at the back of the house, consistent with Samoan culture, which dictates that they should be *'i uta* and *'i tua* of the land and of the house. The remaining interior space, *'i tai* and *'i luma,* will be used as a small dining room and living room area. Different visual design aspects were incorporated to strengthen the ties to Samoan culture within and around the home.

The construction plan keeps Grandfather Tali's house intact so that his children, grandchildren, and great grandchildren might still feel their grandparent's presence when they visit the land. It will be a place for family gatherings, designed to remain as true as possible to what Samoan culture was, is, and is still to come.

The Guest house

The overall idea for the land was to create a place where the whole family can be together. Guest houses provide a place for extend family to stay during gatherings and ceremonies. They also serve as places for hosting visitors, an important aspect of Samoan culture. A smaller guest house will serve as a singular household, secondary to grandfather Tali's house. The family may retire here at the end of the day, or when functions at Grandfather's house have ended. This guest house will be simple enough to be replicated as needed on the land surrounding the *malae*. Although the master plan states that three such houses will be built, this number can be changed according to the needs of the family. The overall form of the guest house was chosen according to what Samoan culture deems a comfortable orientation of spaces. In keeping with the principles of *'i tai/'i uta, 'i luma/'i tua,* the house is designed so that the kitchen and

bathrooms are toward the back of the house, and the bedrooms are at the front. A small exterior lanai in the front, facing the *malae,* will resemble a *fale,* with ten posts representing each of the original ten Tali children.

Traditional Samoan houses would not have an explicitly defined entrance. Yet, taking into account the growing influence of Western culture, it seemed appropriate to define the entrance to the guest house. This type of entrance also allows for an internal semi-division between past and present. The front-left side of the entrance will contain less furniture, in keeping with Samoan culture; and the front-right side will contain a couch, chairs, and a TV—trappings of Western culture.

The entrance will lead into a big open space that can be used as a smaller meeting and gathering space, and that will open into a small kitchenette area. On either side of the front of the house will be a bedroom and bathroom, along with a place for storage.

It is important to note that these guest houses will be shared among the whole Uta-Afasene-Tali family, not distributed one to each family. This is consistent with Samoan culture's emphasis on sharing: property does not belong to the individual but to the family as a whole. For that reason, when families re-unite in Amalau for ceremonies and other occasions, guest houses may be divided up according to gender and age, not necessarily by individual families.

Synthesis

Keeping Grandfather Tali's house as the focal point for the land and all family activities underscores the social dictate that the family is always at the core of Samoan culture. A Samoan village is made up of many extended families. Amalau becomes a

village when the extend family comes together for reunions, ceremonies, and other occasions. The additional revenue-building structures on the site may not have a direct Samoan origin, but that is part of the modernization of Samoan culture. The Uta-Afasene-Tali land, then, becomes a family compound that is all encompassing of Samoan culture, not just visually, but also conceptually. In other words, the culture is represented by the buildings' appearance, along with their layout and intended uses. Underlying the design is the concept of *va*, which preserves and nurtures relationships among the land and the family. This aspect of *va* is evident in the spaces between buildings and within family hierarchies and relationships. Finally, older traditional materials or elements such as wooden posts for the *fale*, traditional Samoan patterns for design details, and sennit lashings will be structurally and visually incorporated into the design. These materials and methods would have been used before the influence of Western building styles, and all come together to create a culturally grounded site.

Prototype/Guidelines of Building Design

The prototype design is significant, not so much in the physicality of the buildings, but in the way it integrates the Samoan culture. Thus, the guidelines below are the necessary instrument. They take into account Samoan directionality, paying attention to *'i tai, 'i uta, 'i luma* and *'i tua* orientations, as well as the size of the space and what it will be used for. They ensure that buildings and spaces are situated in accordance with the needs of Samoan culture and custom.

Directionality: Buildings must be placed in relation to the Samoan directions *'i*

tai, ‘i uta, ‘i luma and *‘i tua*. Both interiors and exteriors must be considered.

Relationships: Relationships between the buildings and their uses, and also relationships between people and their hierarchies within the culture, must be taken into account.

Hierarchies: Cultural, social, spatial, and familial hierarchies must be given proper attention. It is important to define these hierarchies within a space, especially with regard to its use.

Spatial usage: The relationship between size and use must be considered, as well as their relationship to Samoan directional principles, especially with regard to kitchens and bathrooms.

Openness: It is important to maintain transparency and create visual transitions between interior spaces and in relation to adjacent buildings.

Traditional materials: Traditional features on and inside buildings will strengthen the connection to Samoan culture within different spaces and in different surroundings.

These concepts should guide the design of buildings in Samoa and will ensure that the culture is embedded within the architecture.

Design Inspiration

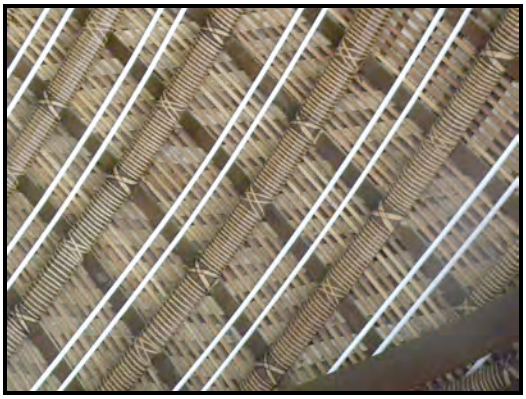
The following examples of architectural inspiration augment the previous case studies and show how culture and architecture, and traditional and modern materials and methods can be fused together to create a beautiful piece of architecture that speaks of Samoan culture and customs.

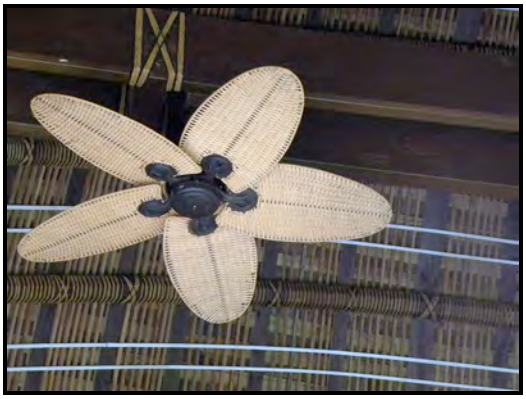
Aggie Grey's Hotel - Apia, Upolu, Samoa




Three Hearts Catholic Church, - Upolu Samoa

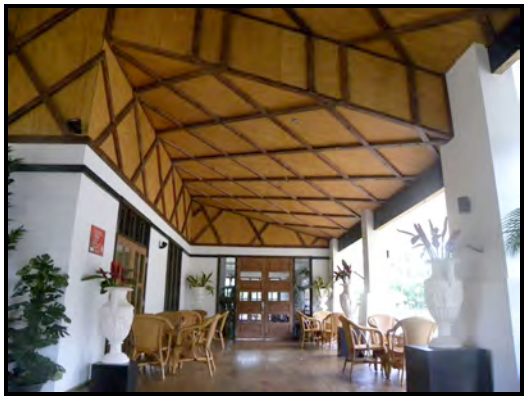

Tusitala Hotel – Apia, Upolu, Samoa



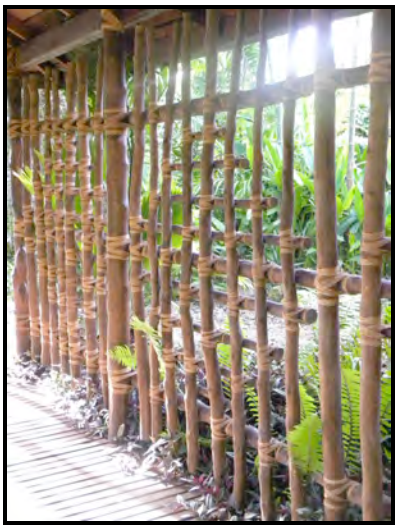


The Bays Café – Alafua, Upolu, Samoa

The Orator Hotel – Upolu Samoa



Sinalei Hotel – Sinalei, Upolu, Samoa

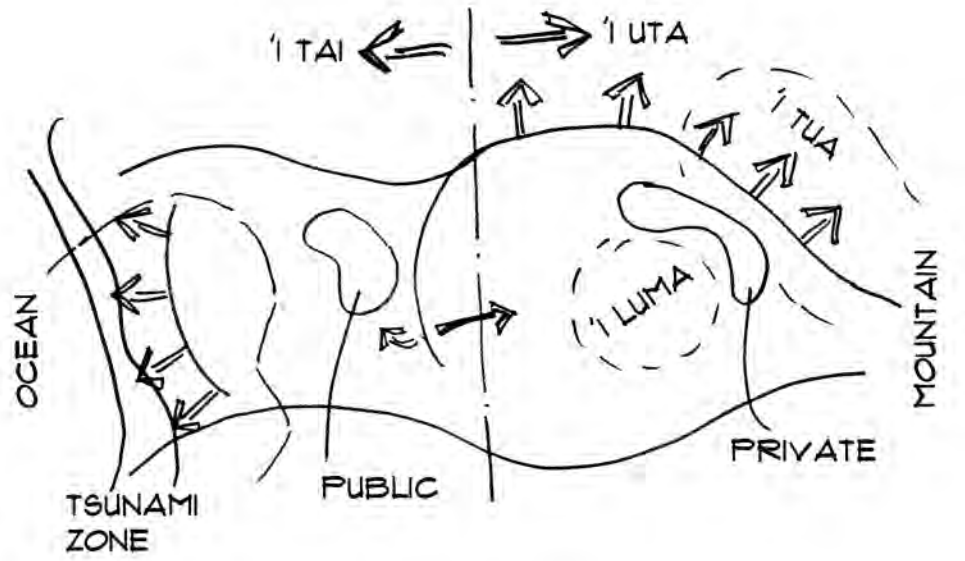


Tanu Beach Fale – Manase, Savai‘i, Samoa

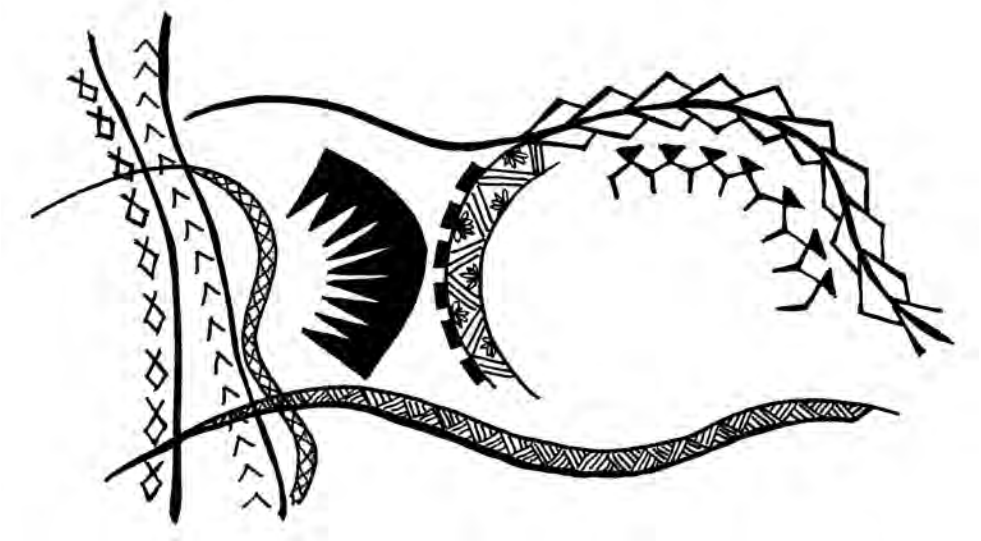
Beach Fale – Manase, Savai‘i, Samoa

Drawings

Opportunities and Constraints Diagram of Amalau

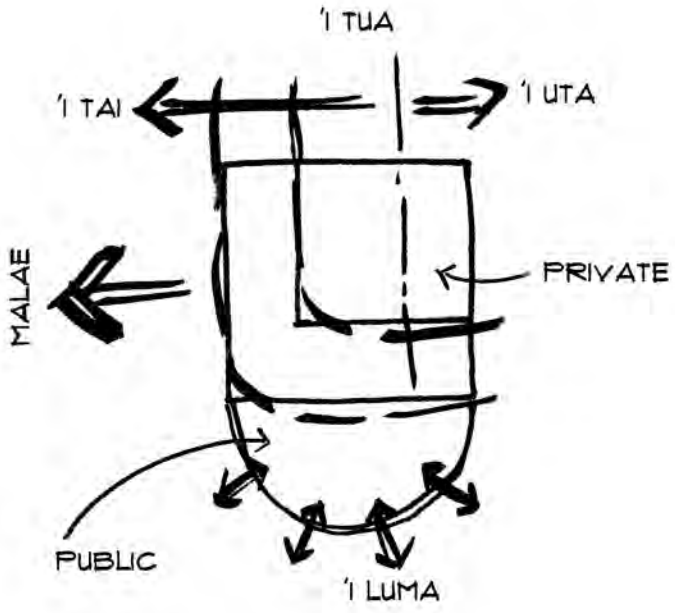


Conceptual Diagram of Amalau



The symbols in these conceptual diagrams make reference to some Polynesian tattoo designs.
In the diagram of Amalau the chain of arrows linked together signifies ancestral ties and the generations that have gone before us, the symbol below that looks like people holding hands signifies family. Both of these sit at the top of the site, which is the private area reserved for the family. The fish at the opposite end of the site relate to the ocean, and the diamond shapes that help create the tsunami zone are symbolic of protection.

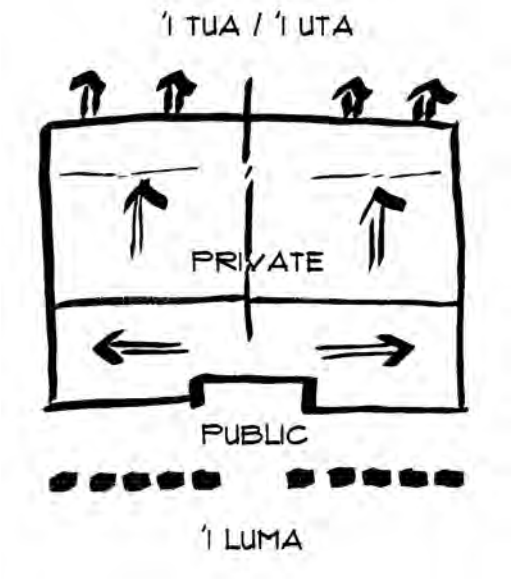
Opportunities and Constraints Diagram of Grandfather Tali's house



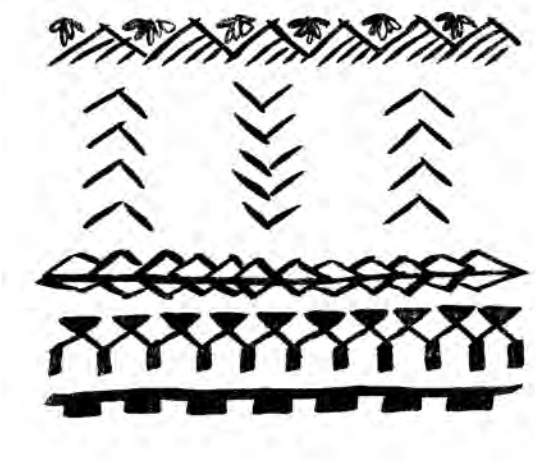
Conceptual Diagram of Grandfather Tali's house

In the diagram of Grandfather Tali's house the arrows are directional in relation to the opportunities and constraints diagram above. The family and ancestral symbols are help express the fact that this is the main family house. And the figure in between the two, symbolizes strength, which is also representative of family.

Opportunities and Constraints Diagram for Guesthouse



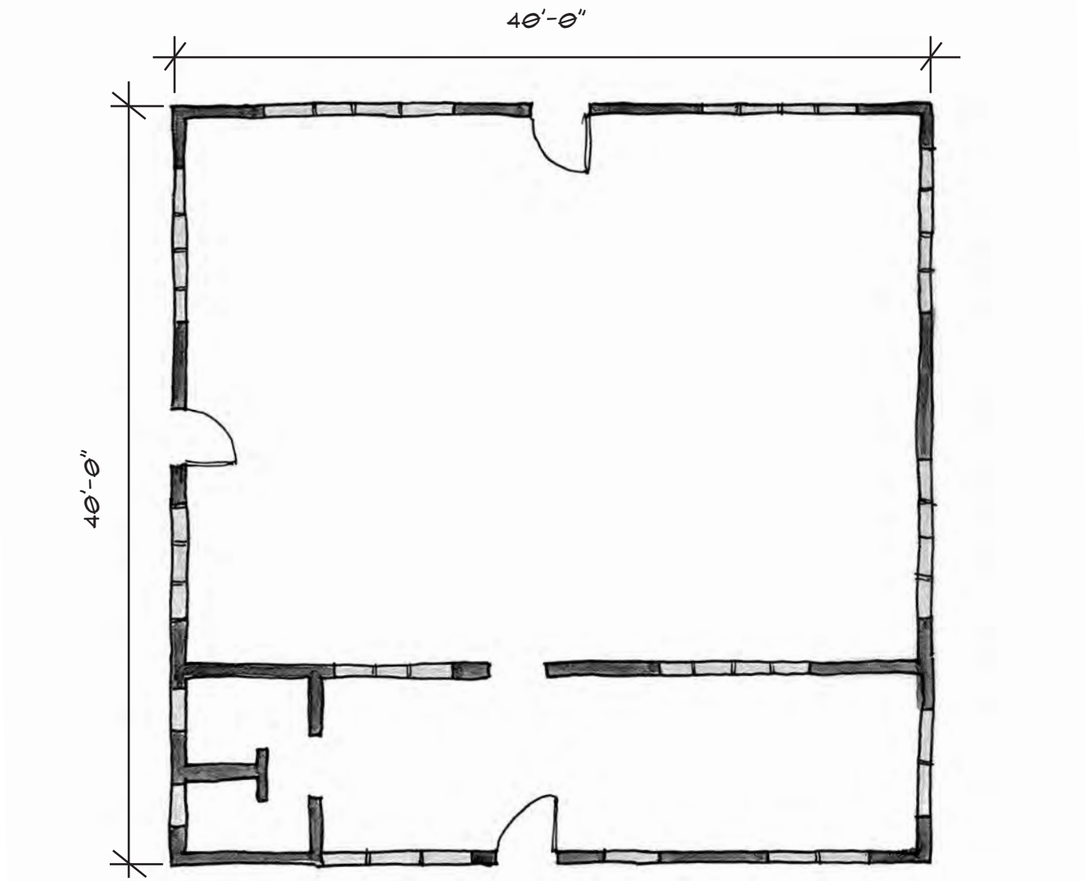
Conceptual Diagram for Guesthouse



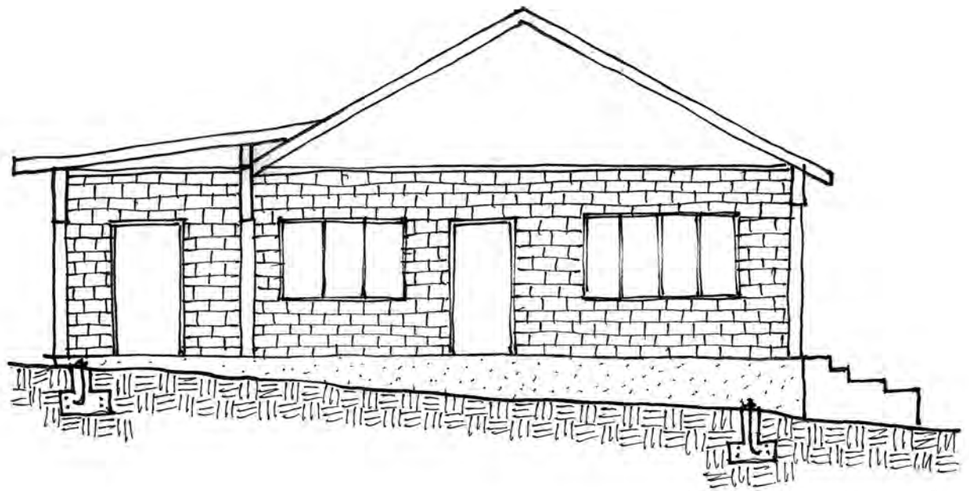
In the diagram of the Guesthouse the family and ancestral symbols are in relation to the ten posts representative of the ten original Tali children. The strength symbol relates to the unity and strength that comes with being part of a family. The flower symbol at the top relates to the back of the house and its association with mountainside.

AMALAU MASTER PLAN LAYOUT

1/64"= 1'-0"

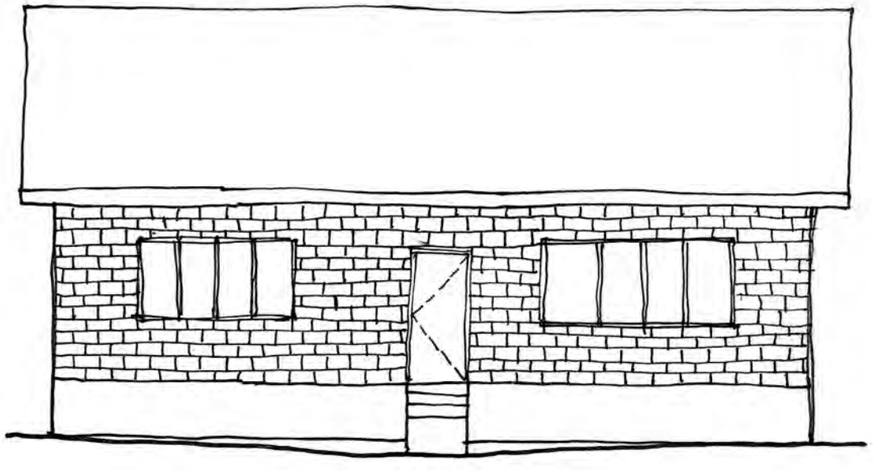


FLOOR PLAN
1/8" = 1'-0"

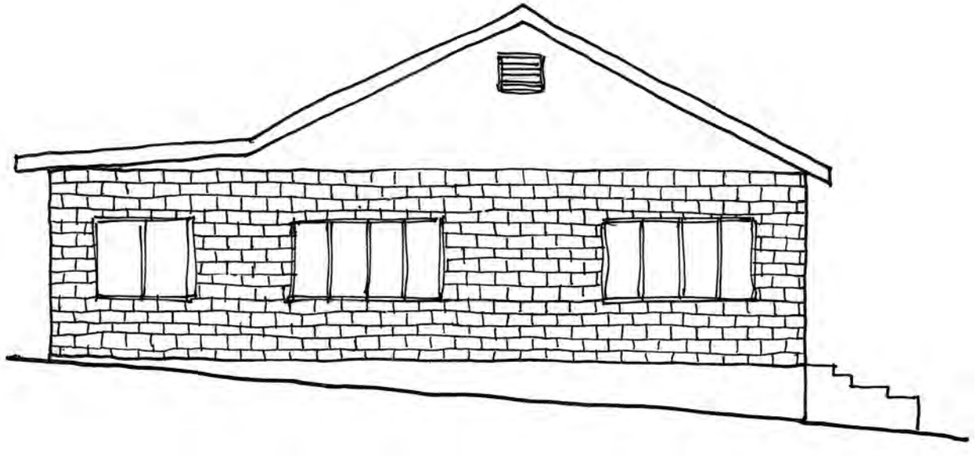


SECTION
1/8" = 1'-0"

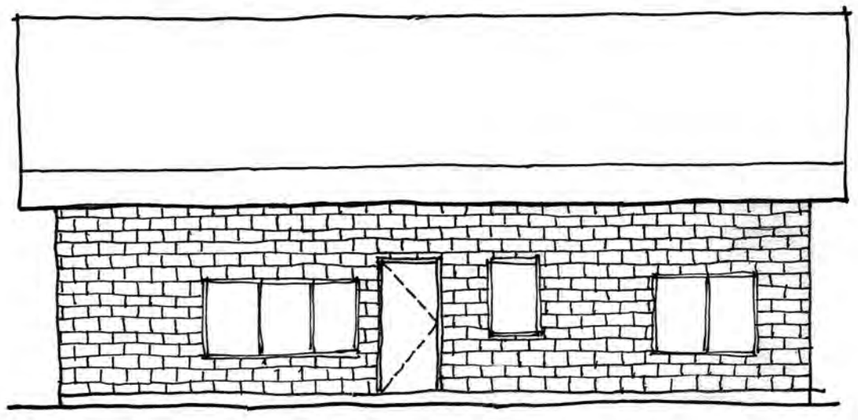
ORIGINAL GRANDFATHER TALI'S HOUSE



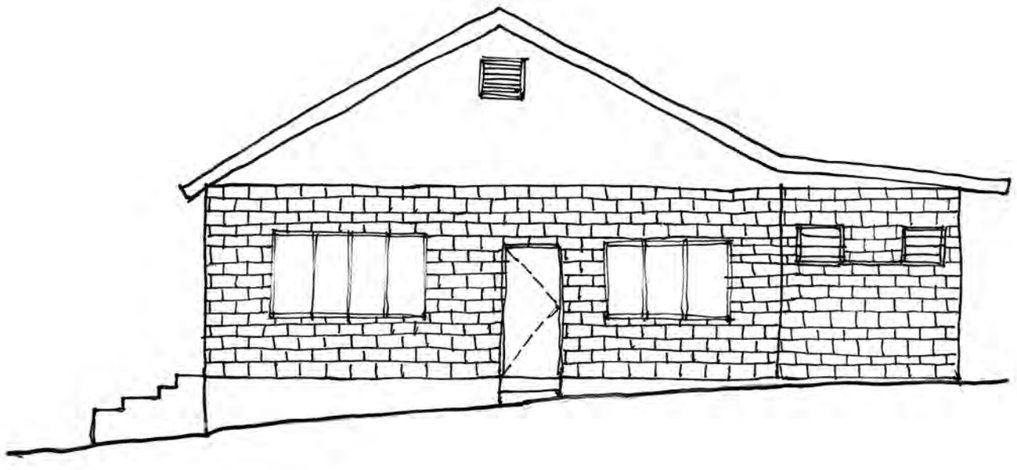
NORTH ELEVATION
1/8" = 1'-0"



WEST ELEVATION
1/8" = 1'-0"

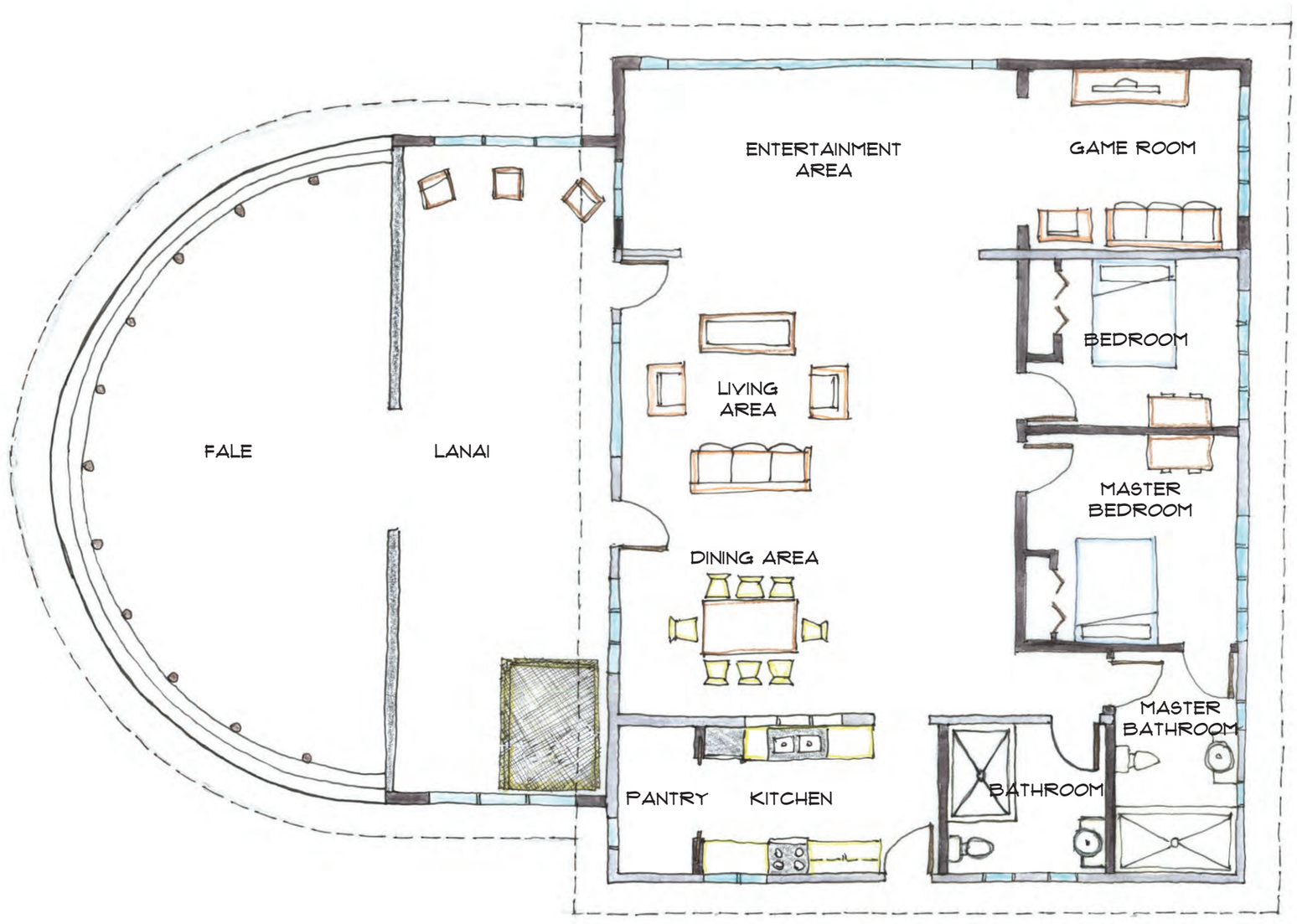


SOUTH ELEVATION
1/8" = 1'-0"



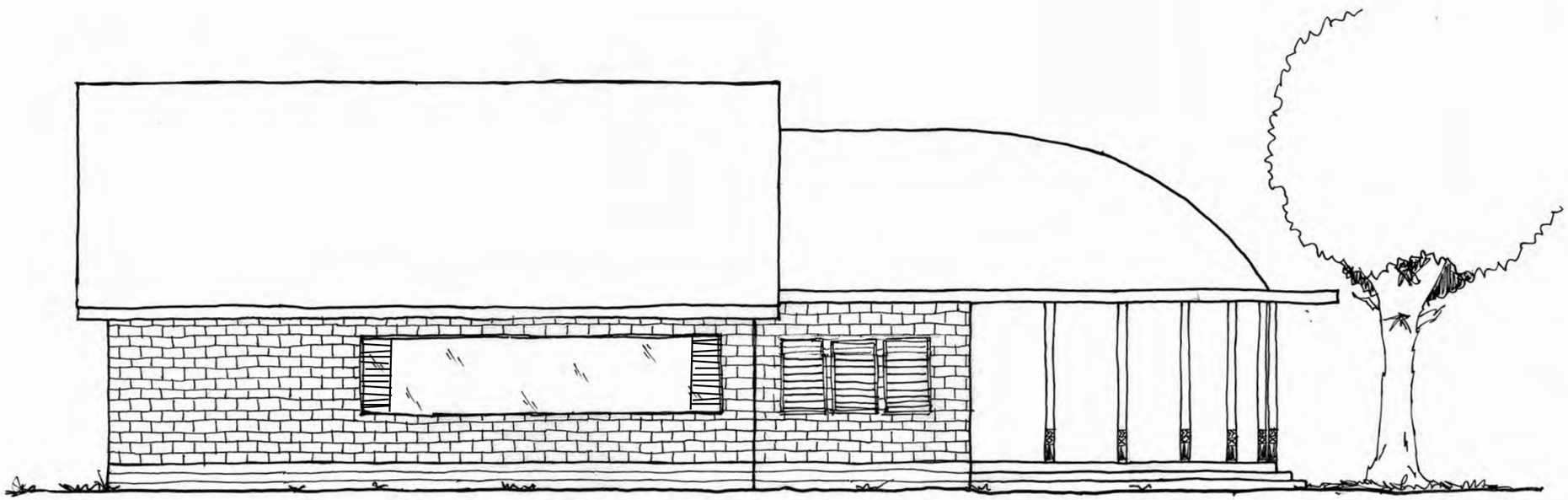
EAST ELEVATION
1/8" = 1'-0"

ORIGINAL GRANDFATHER TALI'S HOUSE

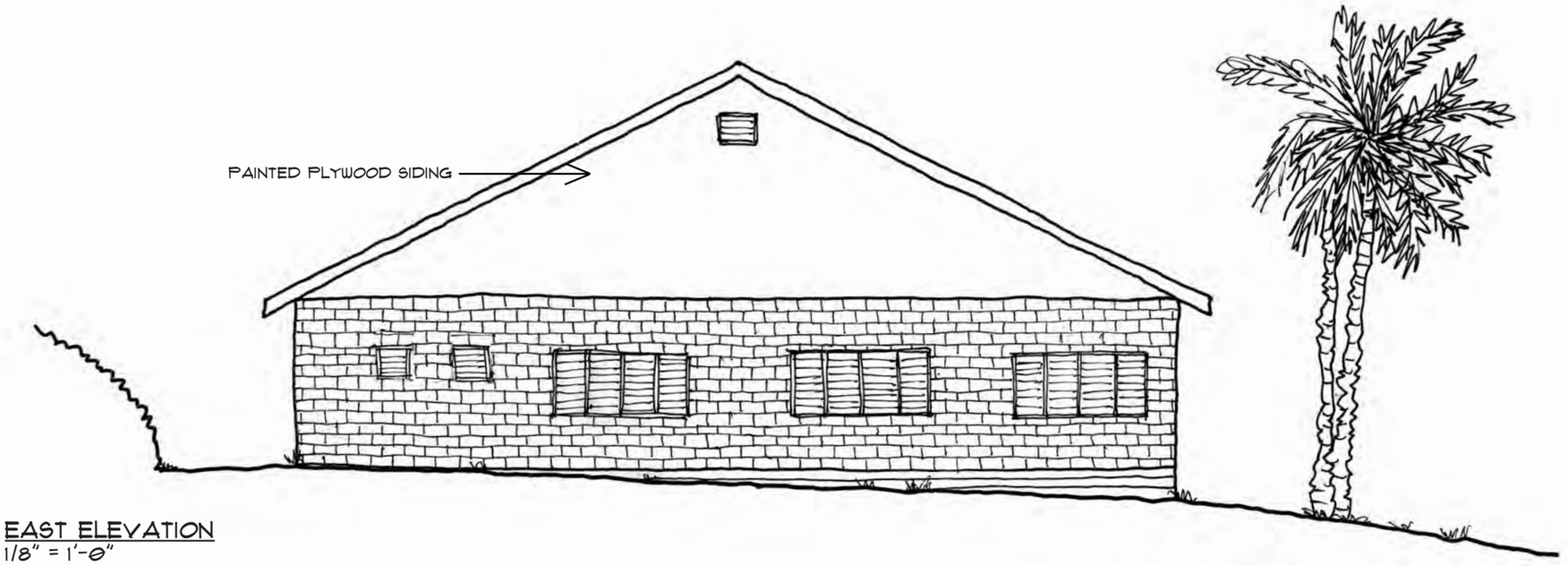


FLOOR PLAN
1/8" = 1'-0"

GRANDFATHER TALI'S HOUSE



NORTH ELEVATION
1/8" = 1'-0"



EAST ELEVATION
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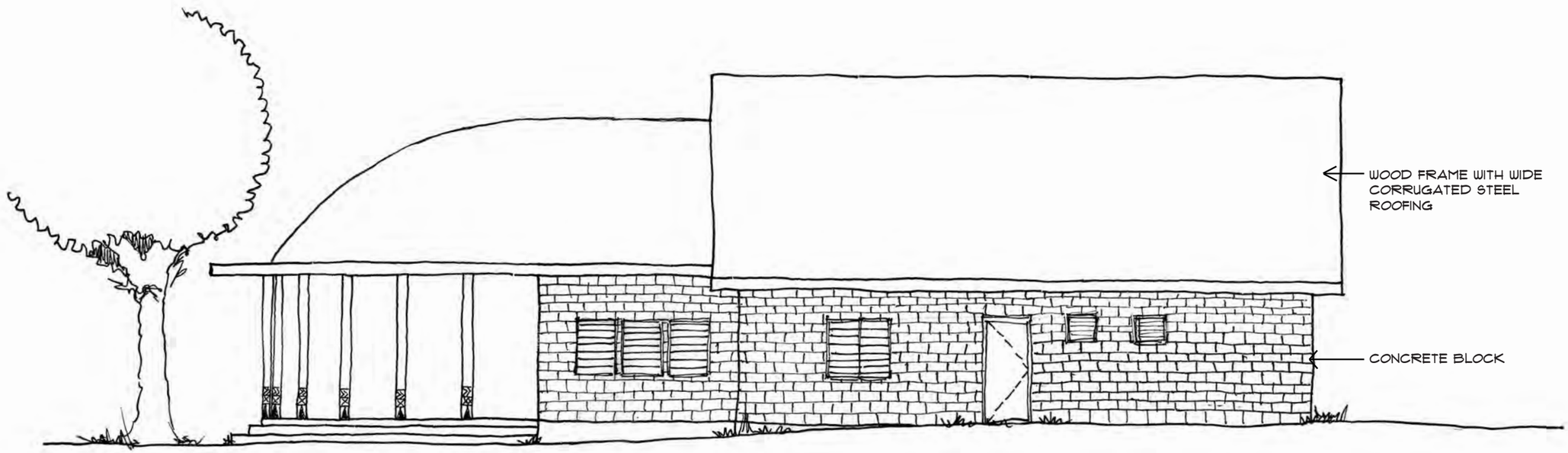

SOUTH ELEVATION
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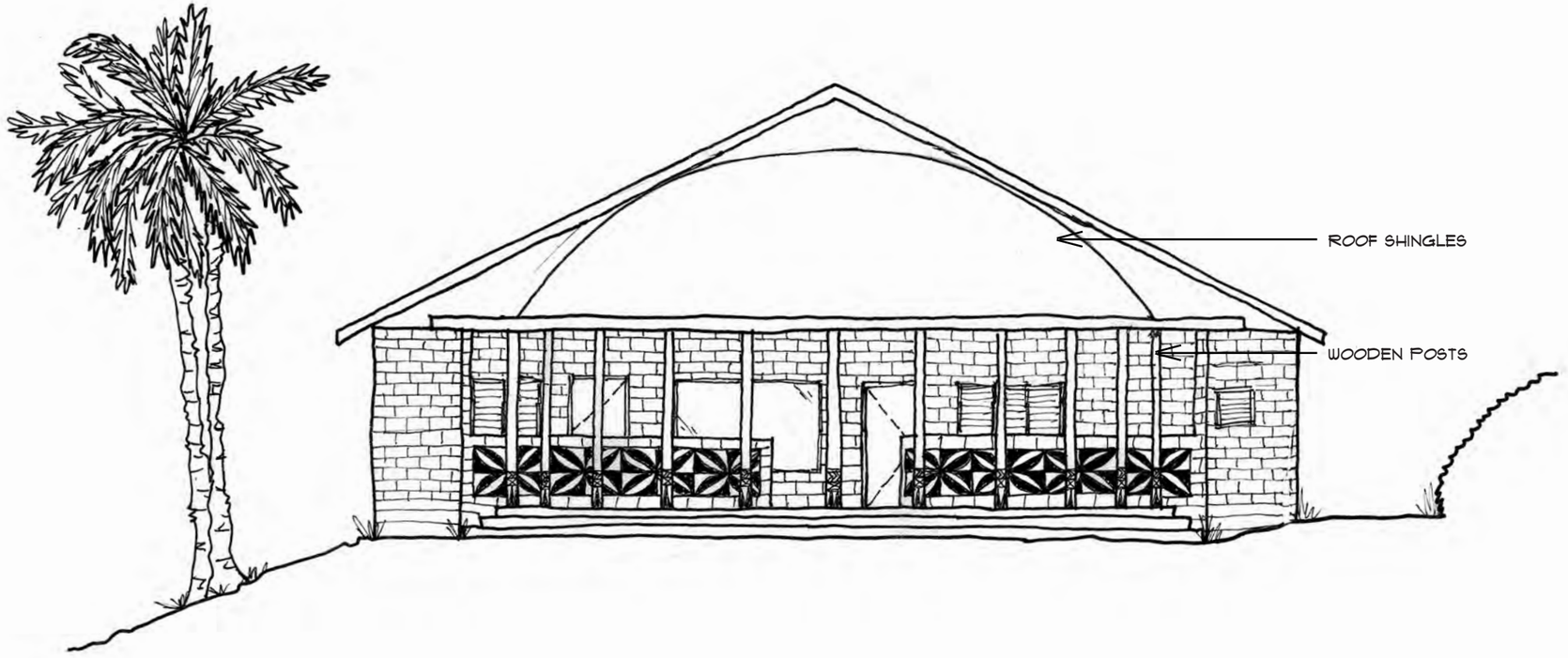
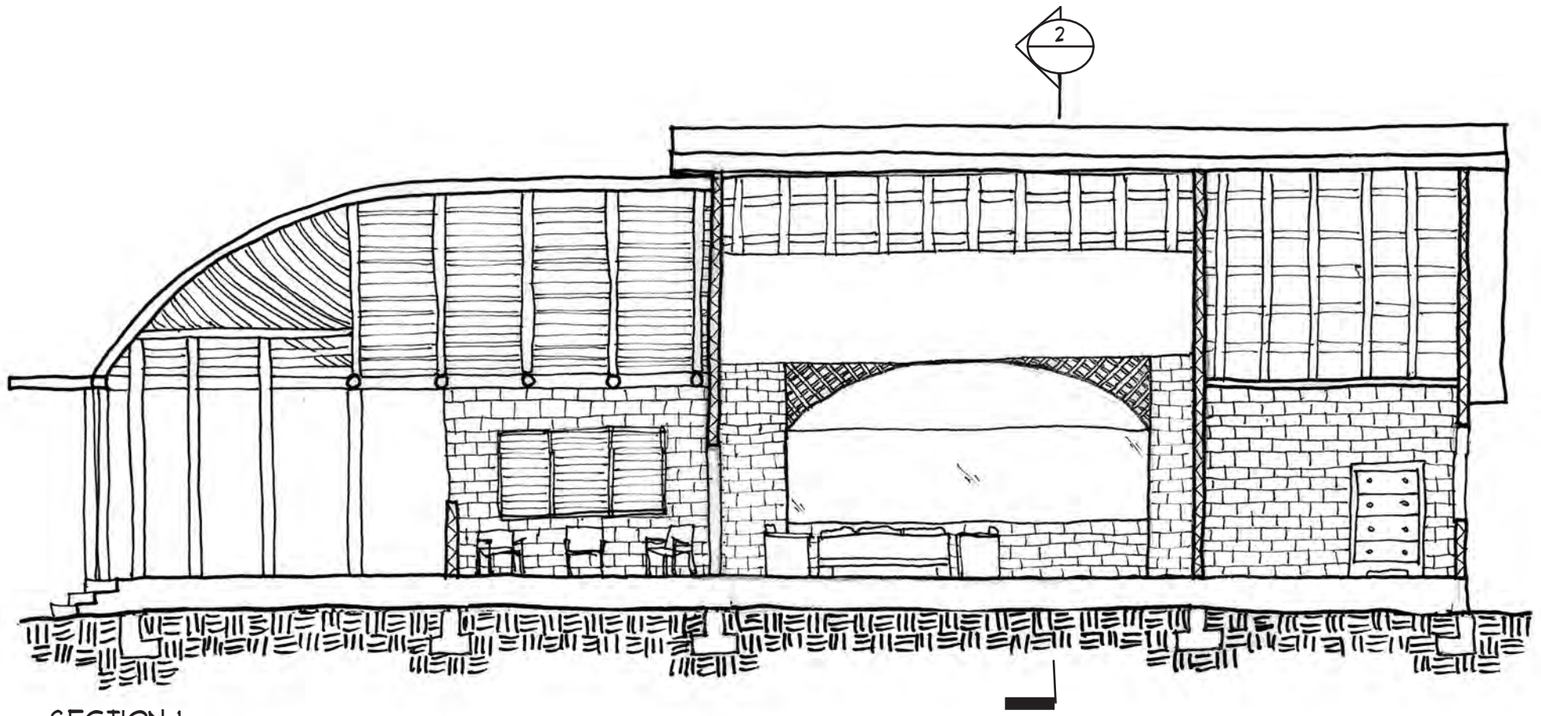


WEST ELEVATION
1/8" = 1'-0"

GRANDFATHER TALI'S HOUSE



SECTION 1
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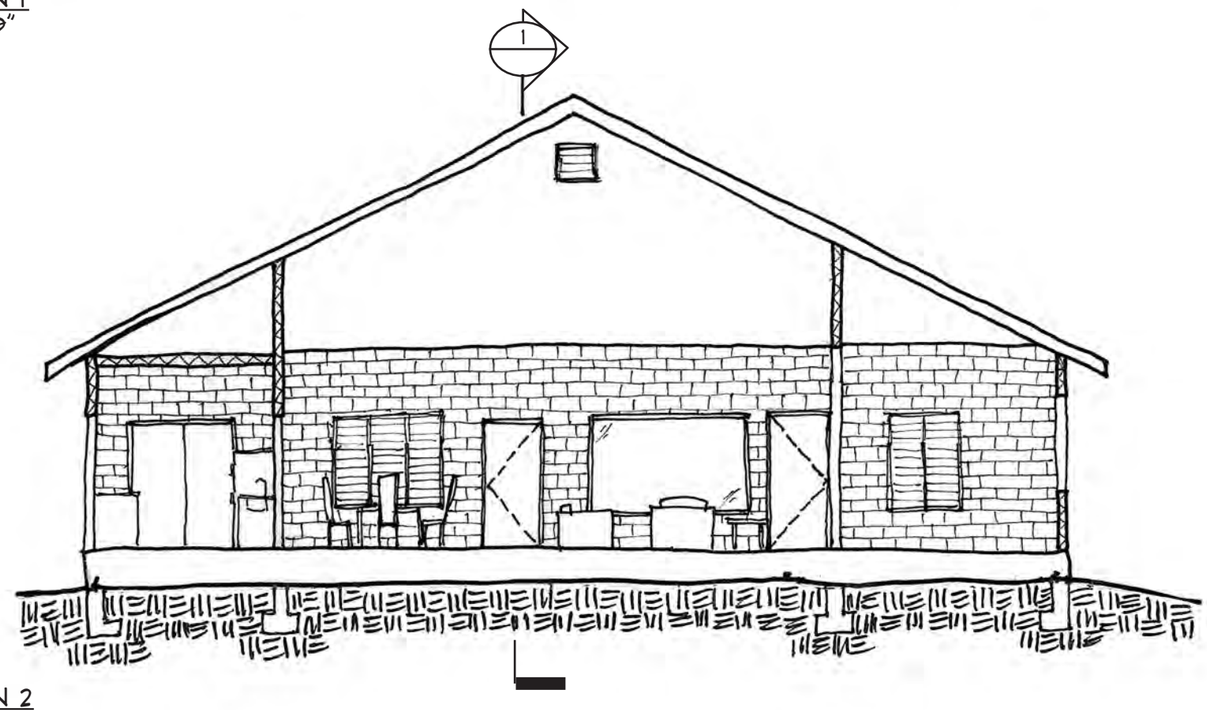

SECTION 2
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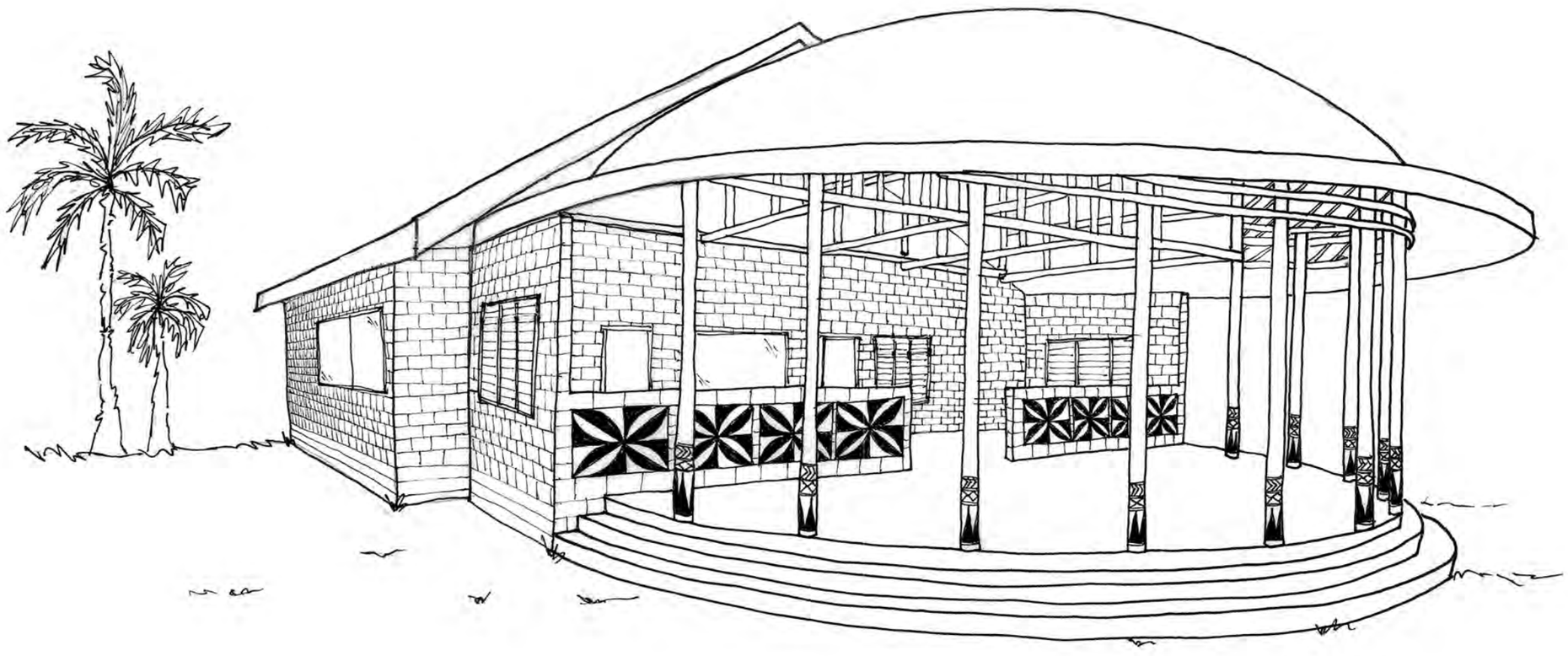
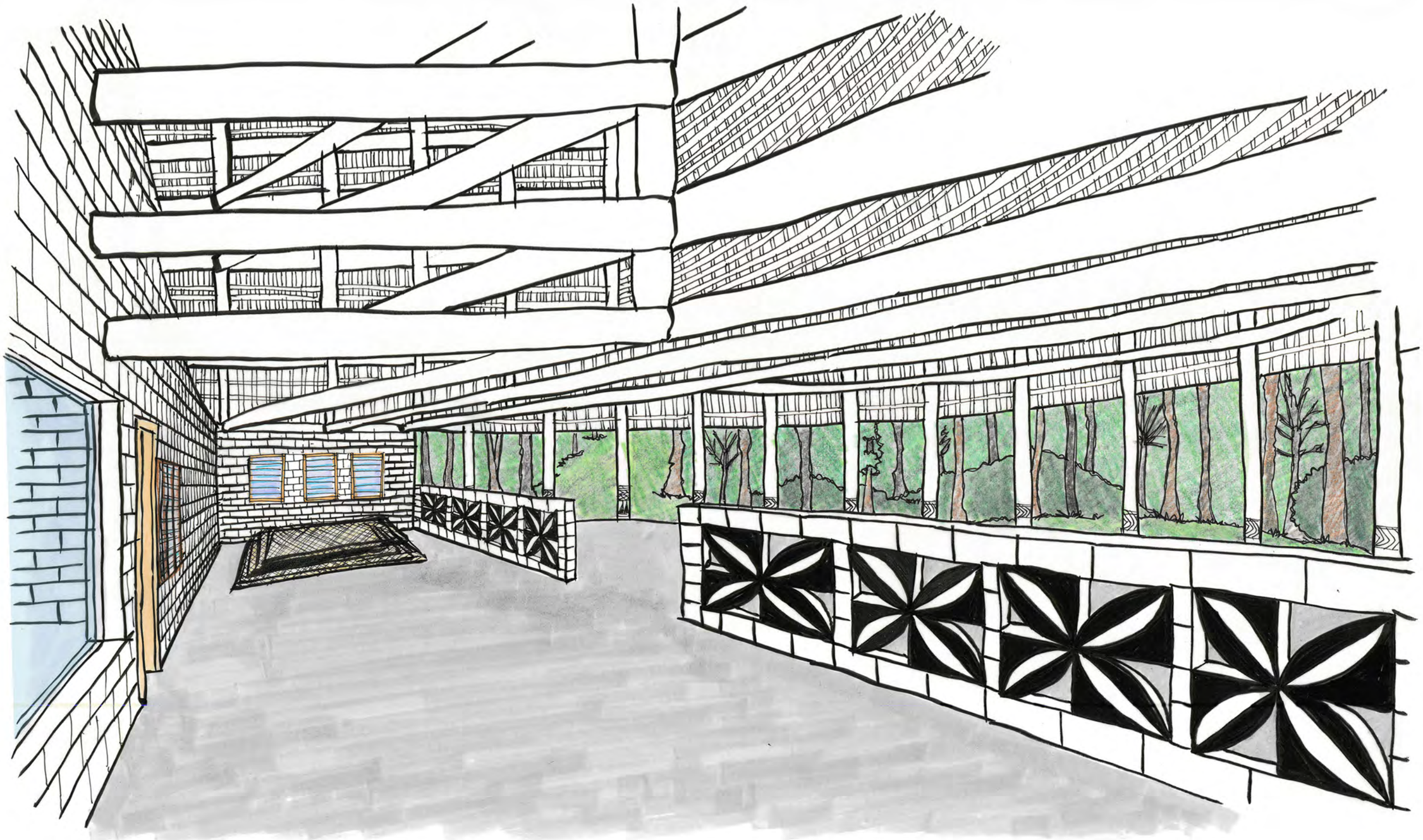


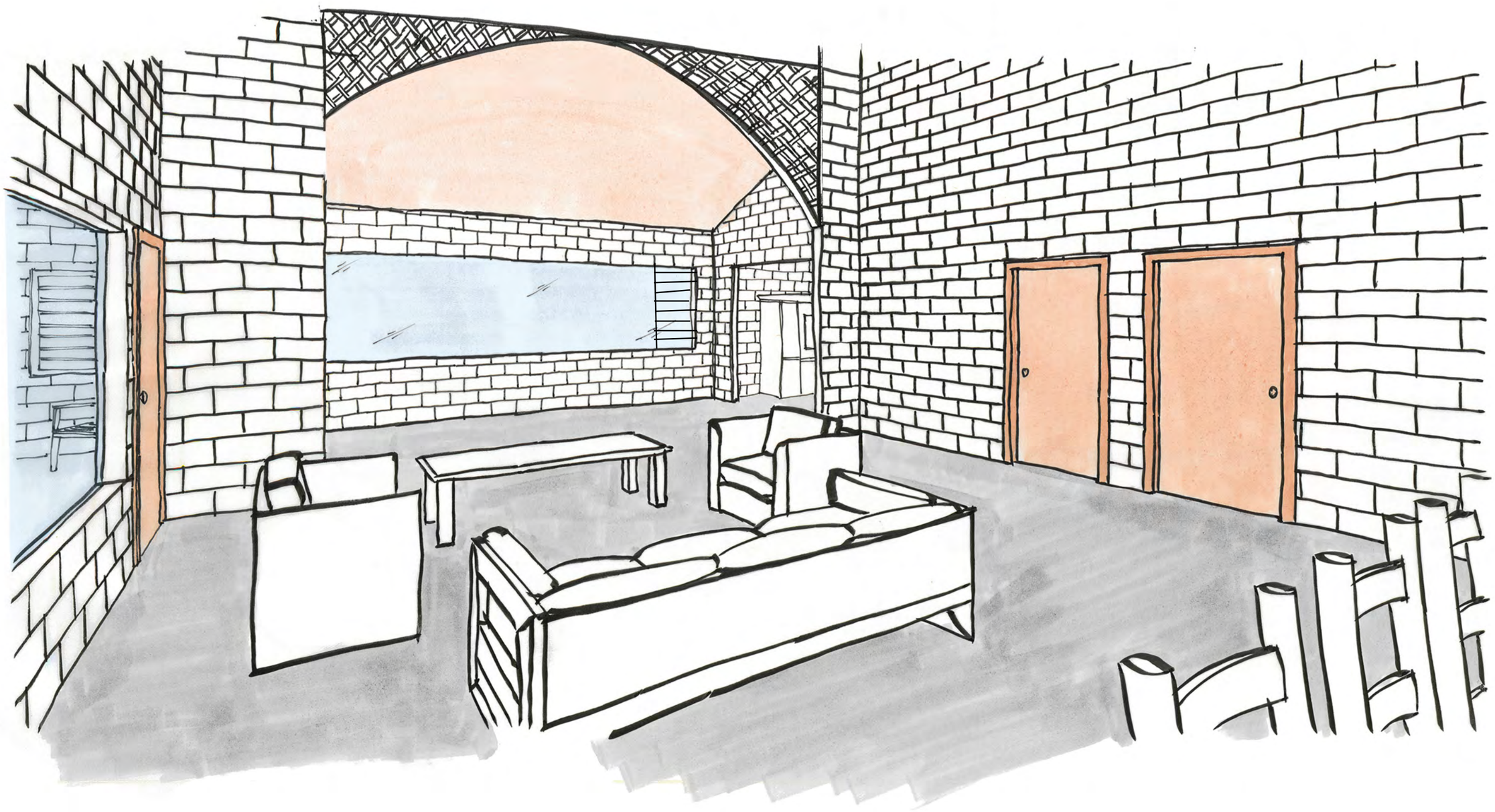
NORTH - WEST PERSPECTIVE

GRANDFATHER TALI'S HOUSE

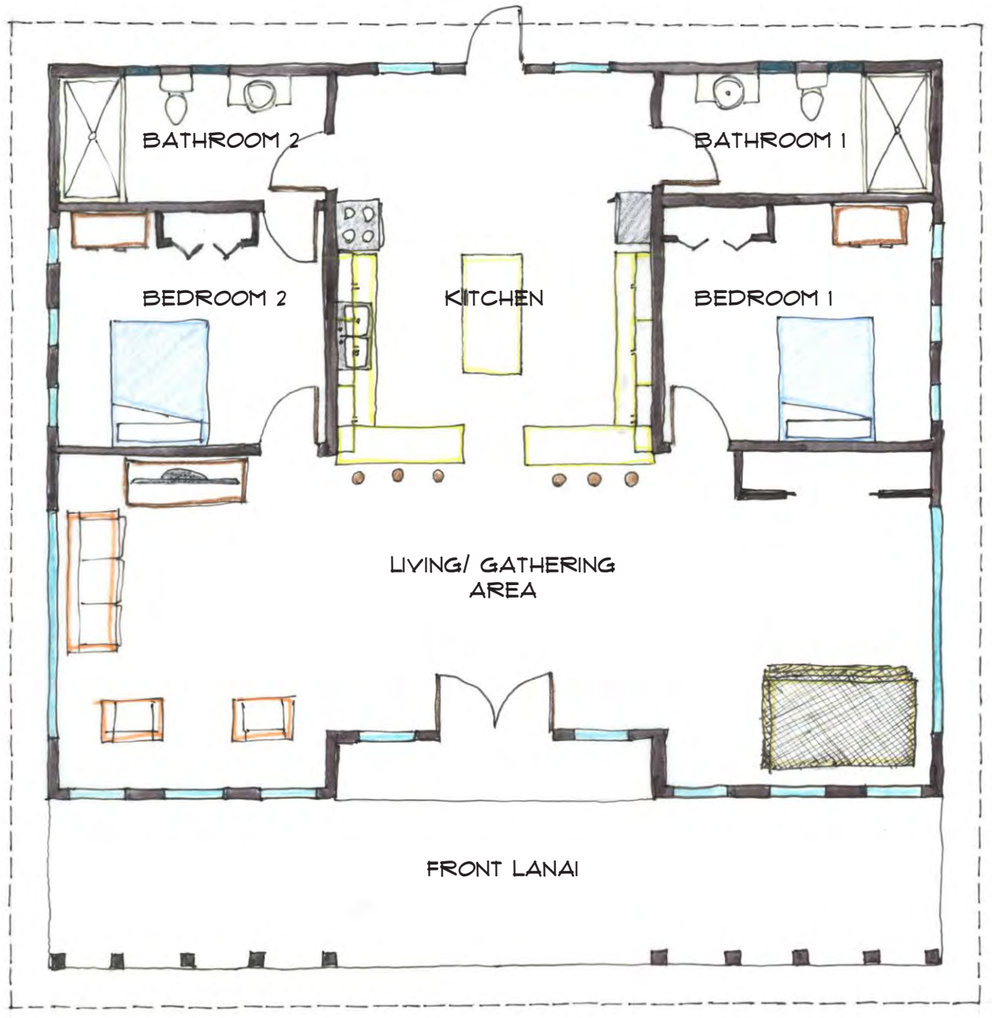


INTERIOR FALE PERSPECTIVE

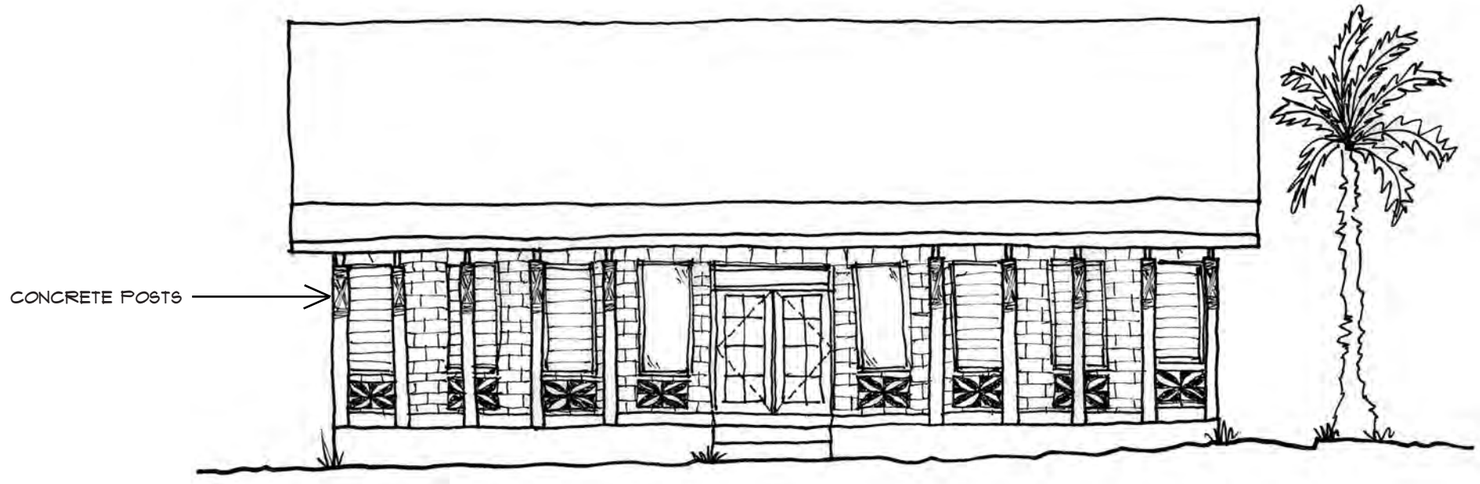
GRANDFATHER TALI'S HOUSE



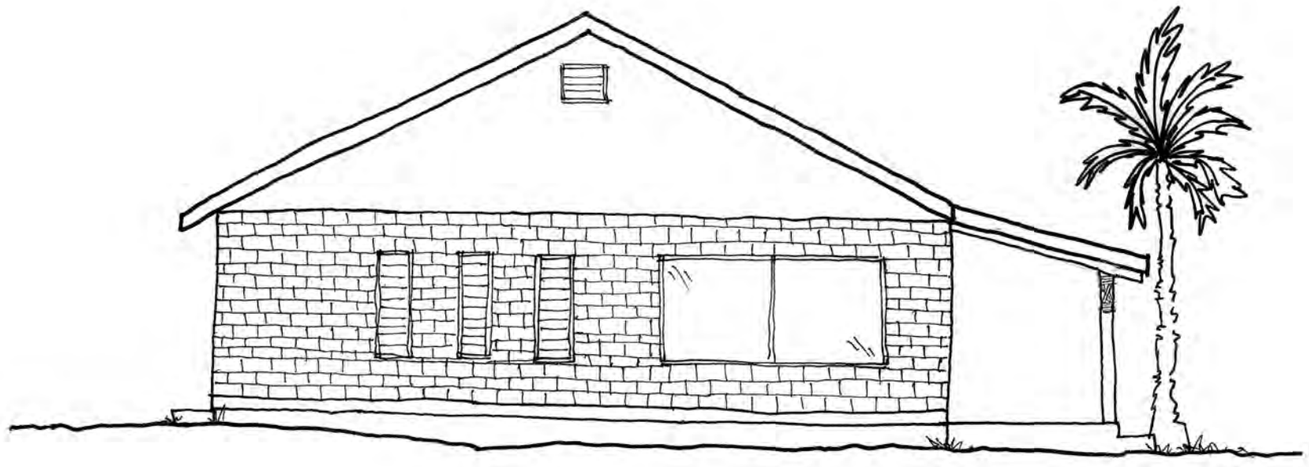
INTERIOR LIVING ROOM PERSPECTIVE



FLOOR PLAN
1/8" = 1'-0"



ELEVATION A
1/8" = 1'-0"



ELEVATION B
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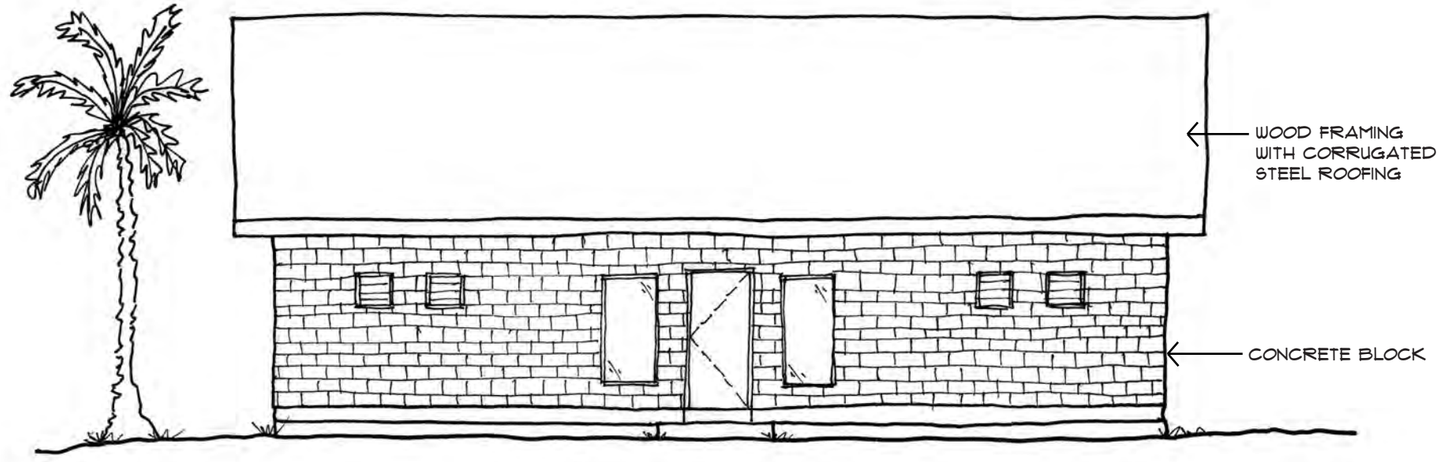

ELEVATION C
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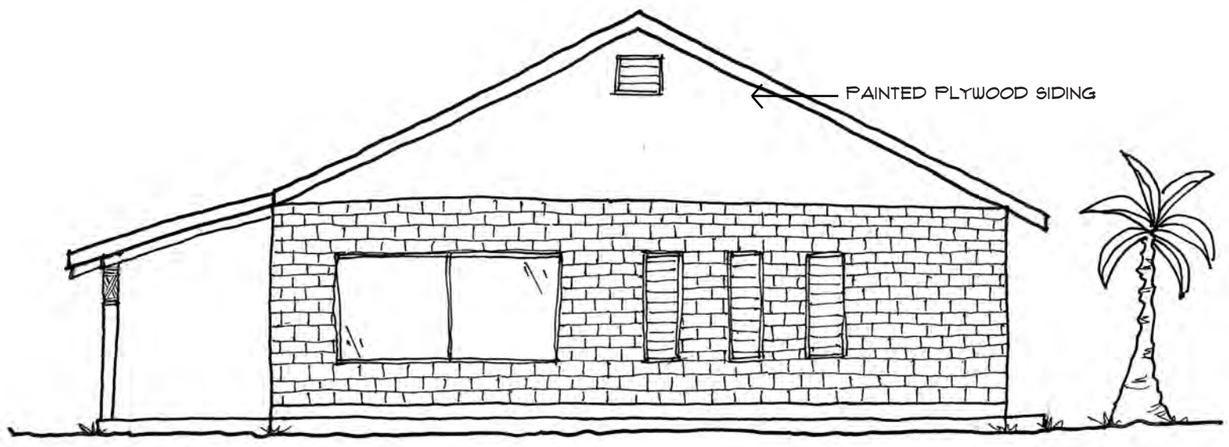
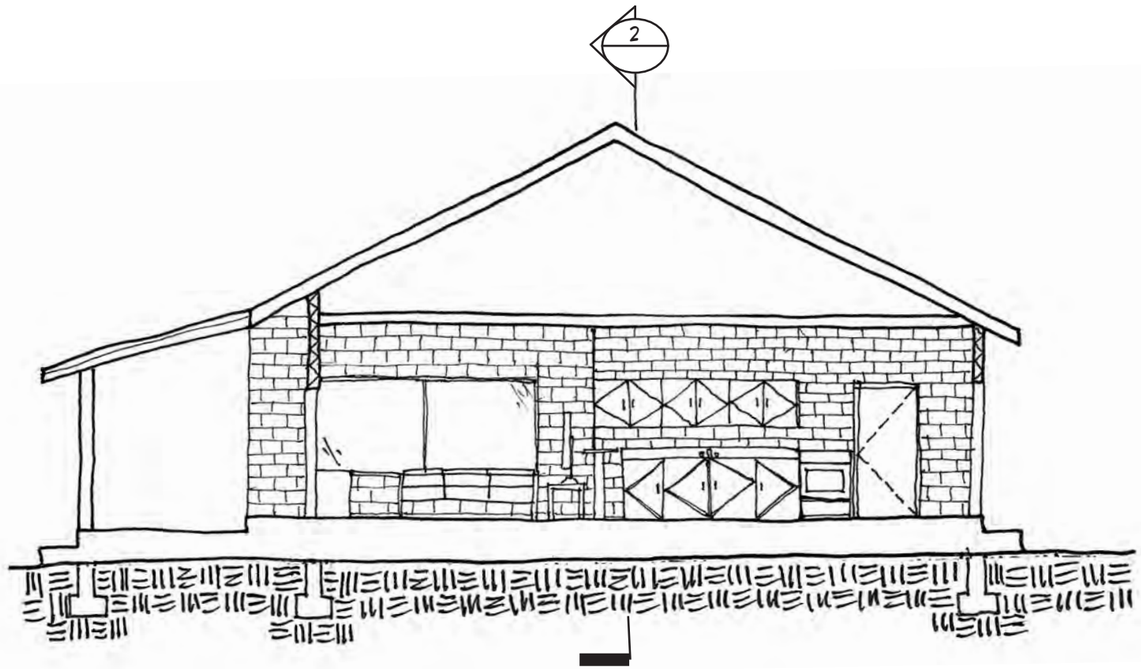


ELEVATION D
1/8" = 1'-0"



SECTION 1
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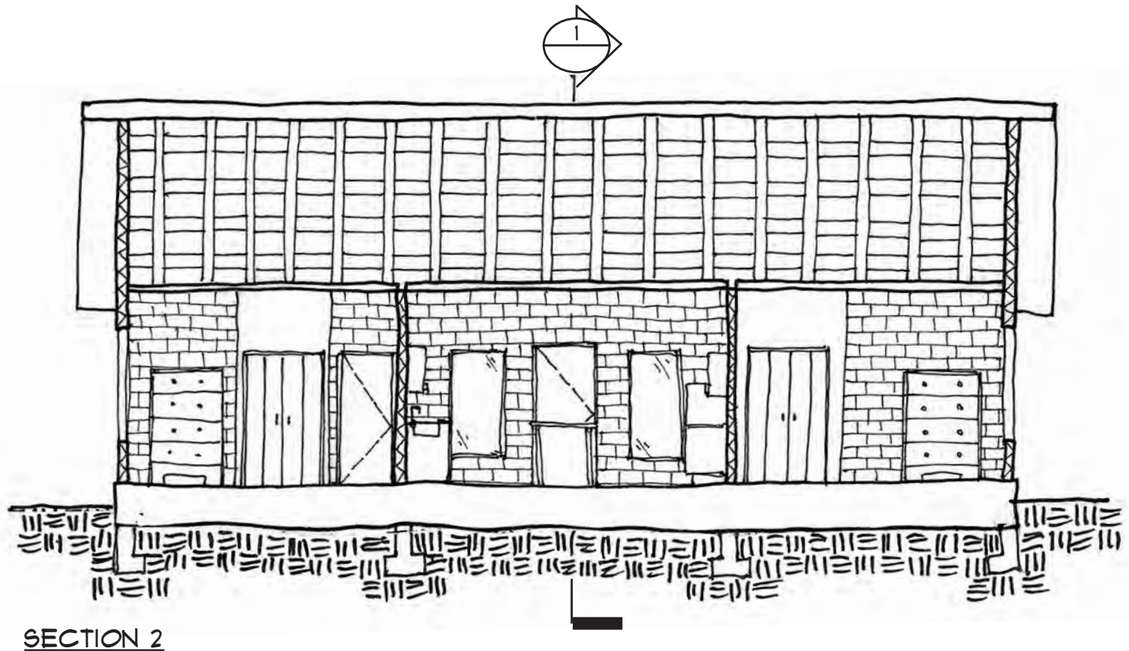
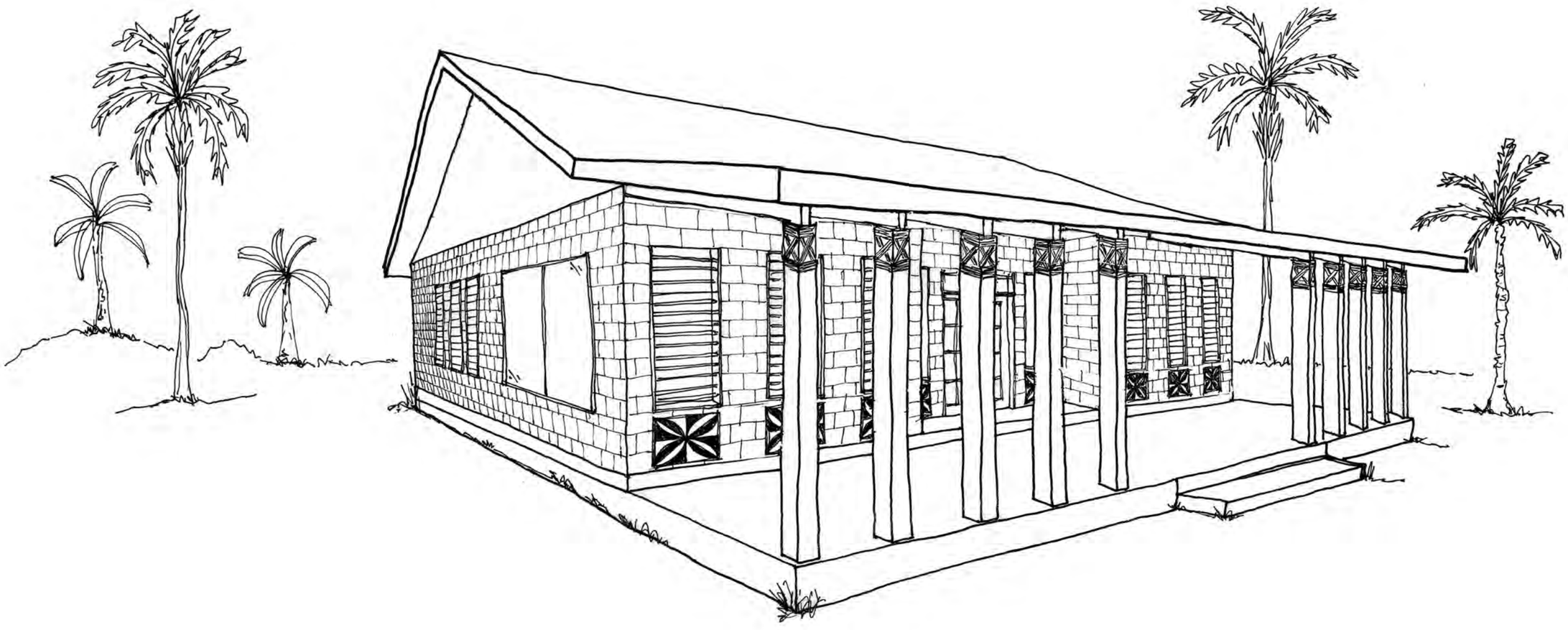


SECTION 2
1/8" = 1'-0"

GUEST HOUSE

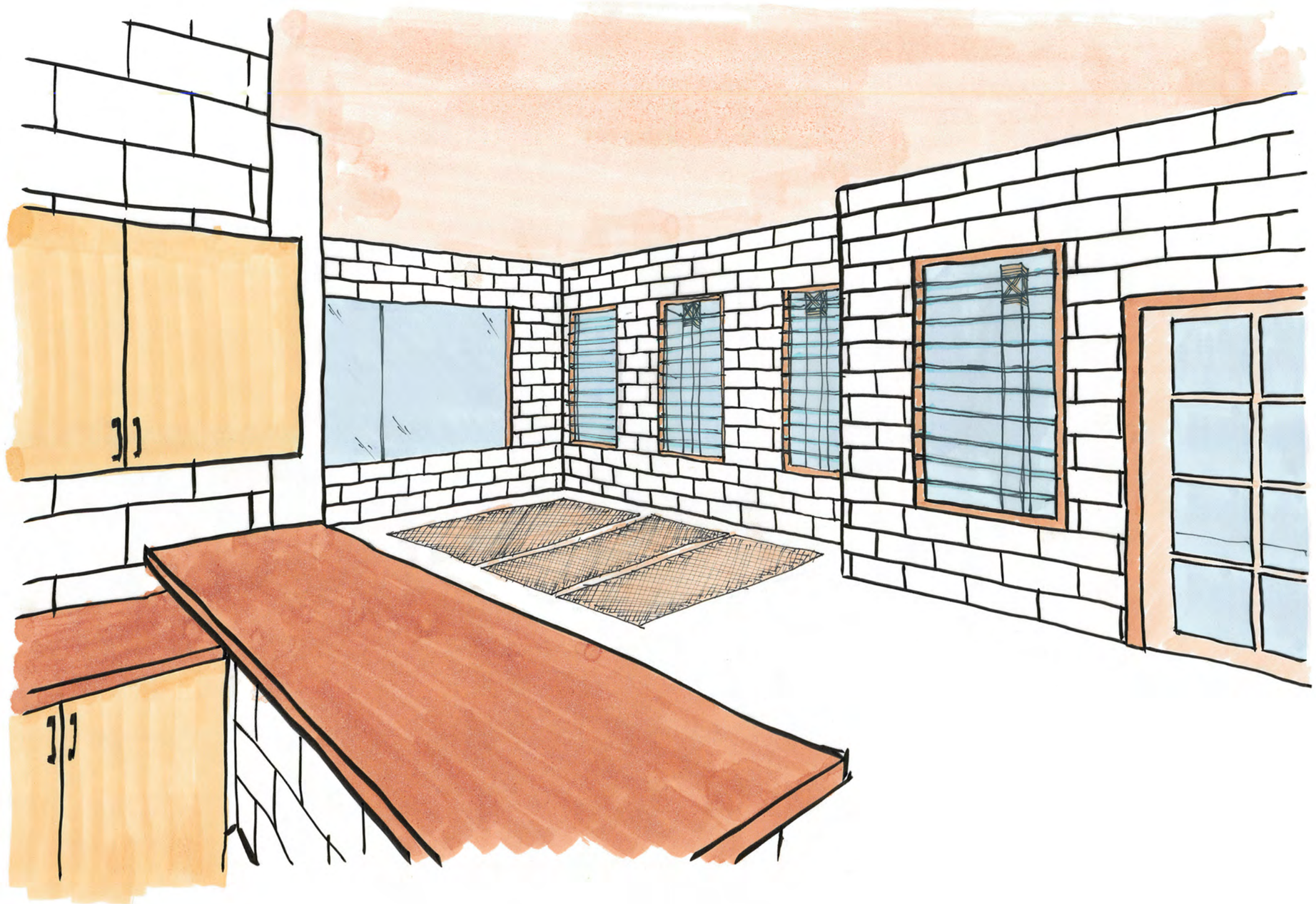


A - B PERSPECTIVE

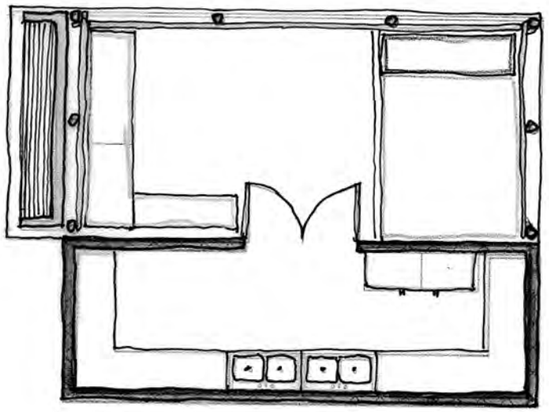
GUEST HOUSE

INTERIOR FRONT LANAI PERSPECTIVE

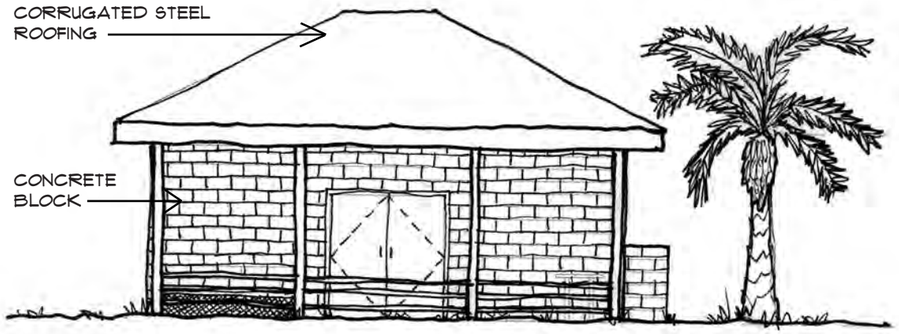
GUEST HOUSE



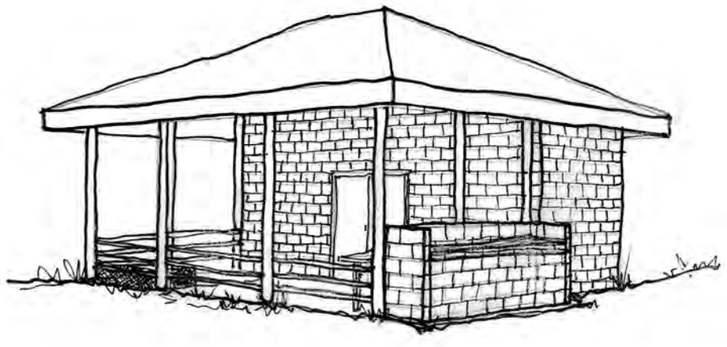
INTERIOR LIVING AREA PERSPECTIVE

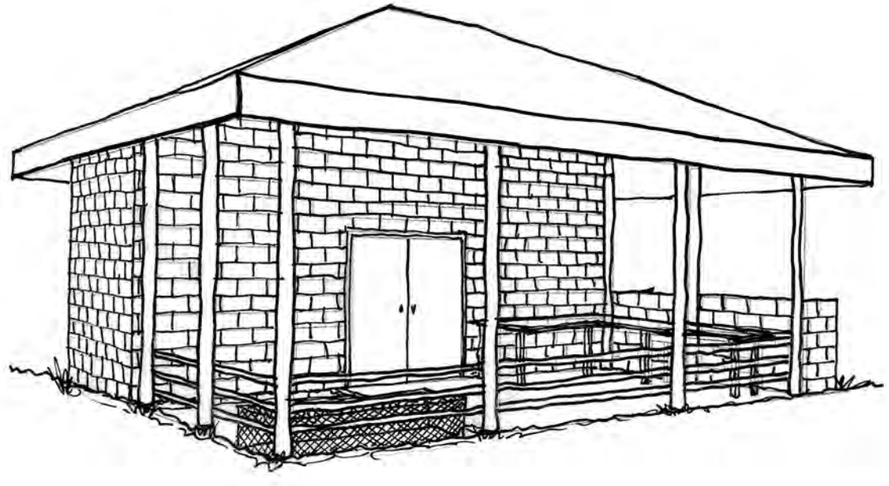


FLOOR PLAN
1/8" = 1'-0"



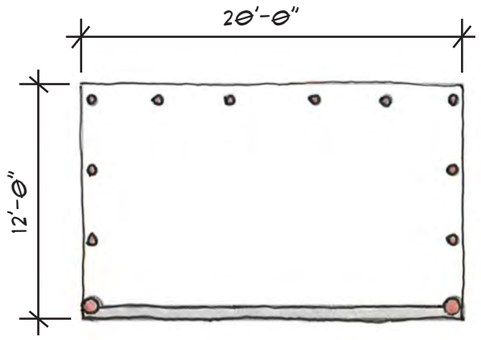
ELEVATION A
1/8" = 1'-0"



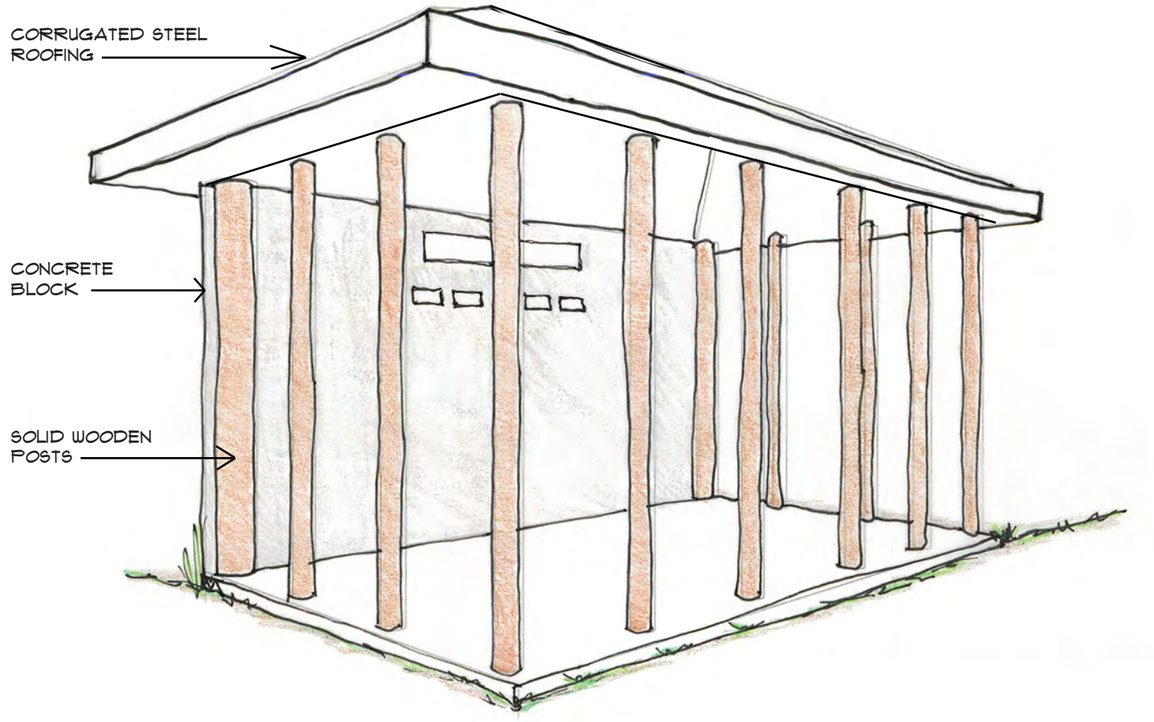


This modified umu kuka is different than most umu kuka found in a traditional Samoan village. Designed to include modern necesities requested by the family. Therefore the front of this structure is that of the traditional rock floor with wooden posts and the modern addition becomes the enclosed back portion used for the sanitary preparation of foods. A modern bbq grill has also been added to this structure.

MODIFIED UMU KUKA



FLOOR PLAN
1/8" = 1'-0"



This memorial was designed as a place for the family to honor and remember those who have passed on before them. In Samoan culture it is customary to bury deceased relatives close to ones home and on family land.

This fale structure is designed with a back wall in which the family can place name plates in rememberance of those who have already passed on. Embedded in this back wall are two large posts representing Grandfather and Grandmother Tali. The additonal ten posts are representative of the ten original Tali children, one post for each child. The idea being that each post is to be carved with a Samoan design or pattern that has been created by the family of each of the ten original children.

FAMILY MEMORIAL

Blue Mars Renderings of Amalau

Overhead overall view of Amalau Tali-Afasene-Uta family land

View from beach end towards back of valley

Overhead view of Amalau looking towards the ocean

Overhead view of beach end of Amalau

Overhead view of Amalau village

Perspective of Tali-Afasene-Uta family compound

Perspective at guesthouse looking towards mountain

Perspective at *malae* looking towards mountain

Perspective of Grandfather Tali's house

Perspective of *malae*, memorial, traditional *fale*, and guesthouse

Perspective of *umu kuka* *

* A special thank you to Tiffany Nahinu, who created the 3D site model of Amalau using Blue Mars (a virtual world creation software) for the purposes of creating these beautiful site renderings.

Conclusion

"*E fa'apupuati le gase*. Like a *ti* plantation that never dies. Traditions, family trees and the happenings of ancient times are not forgotten, but survive among the people." (Schultz 2008: 52)

The Experience

In writing and designing this thesis, my knowledge and appreciation of the culture and history of the Samoan islands and its people have grown. I have also come to understand how culture and climate can influence the design of architecture in different places in the world, specifically in the Pacific Islands. I have observed a culture that has grown and adapted to new experiences and challenges. Instead of discouraging and rejecting outside influences, Samoans seem open to inviting new ideas and adapting them to fit their lifestyles.

In discussing this vision with different people, I have found that most reactions have been positive, strengthening my conviction that new architecture in Samoa should not lose the essence of being Samoan, and that, while it is important to invite and allow outside influences into Samoan life and culture, it is essential to ensure that Samoan culture remains the focus.

I was blessed to have the support and guidance of my friend's family and their family chief, and I am grateful that they allowed me to use their family land as a site for this thesis. It was through discussions with them and specifically their chief, Chief Uta, that I was able to design the guidelines for developing the land and other buildings on site to best suit the needs and wants of the family. My intention was to develop a forward-looking plan that reflected Samoan culture while also catering to the family's vision for the land.

The fusion of modern and traditional, old and new, Samoan and non-Samoan architecture is already taking place in the islands. And as long as there are Samoans and non-Samoans alike who agree to continue working toward this fusion, Samoan architecture can only continue to grow and flourish.

The Future of Samoan Architecture

The Samoan lifestyle is deeply rooted in its culture, a culture that carries with it the strength, faith, and respect of its people. Samoan culture has adapted to many changes—most recently modernization—without losing the essence of what is truly *fa'asamoa*. Although housing has transitioned from a traditional open form to a more enclosed form, and has begun to incorporate Western materials and methods, it has nonetheless retained many features the traditional Samoan *fale*. Samoa has found a way to merge two cultures, adapting both to fit the needs of a modern Samoan lifestyle. Although culture can never really be considered static, certain aspects of it can be preserved in different ways, such as in oral histories, written histories, and physical representations. By taking examples from the past and applying them to new concepts and designs, we can ensure that culture and tradition will continue to represent and honor Samoan culture in the truest way possible.

The goal of this project was to design a prototypical family compound that would serve as a model for Samoans looking to lay out their lands and ensure a sustainable future for the island and for their families. It will allow them to create a miniature village of their own within the greater village scheme, a place where they can generate their own resources, provide for future generations, and strengthen their ties to the culture.

With the growing recognition of the importance of integrating culture into architecture—not only within the Polynesian architectural community, but also within the greater architectural community—there will be a greater emphasis on ensuring that culture gets represented in newer architecture. Samoa has already begun working toward this. Given the increasing number of culturally informed structures being built in the islands, I have high hopes that the current generation and future generations will be inspired to maintain and further the development of the Samoan culture, and create a new visual idiom—not just in architecture but in other media as well. I hope that Samoa can serve as an example, making it known to the world that although culture is always evolving, we can keep the best of the past, merge it with the modernity of the present, to create a future that leaves nothing behind and represents the culture in the best possible way for generations to come.

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